



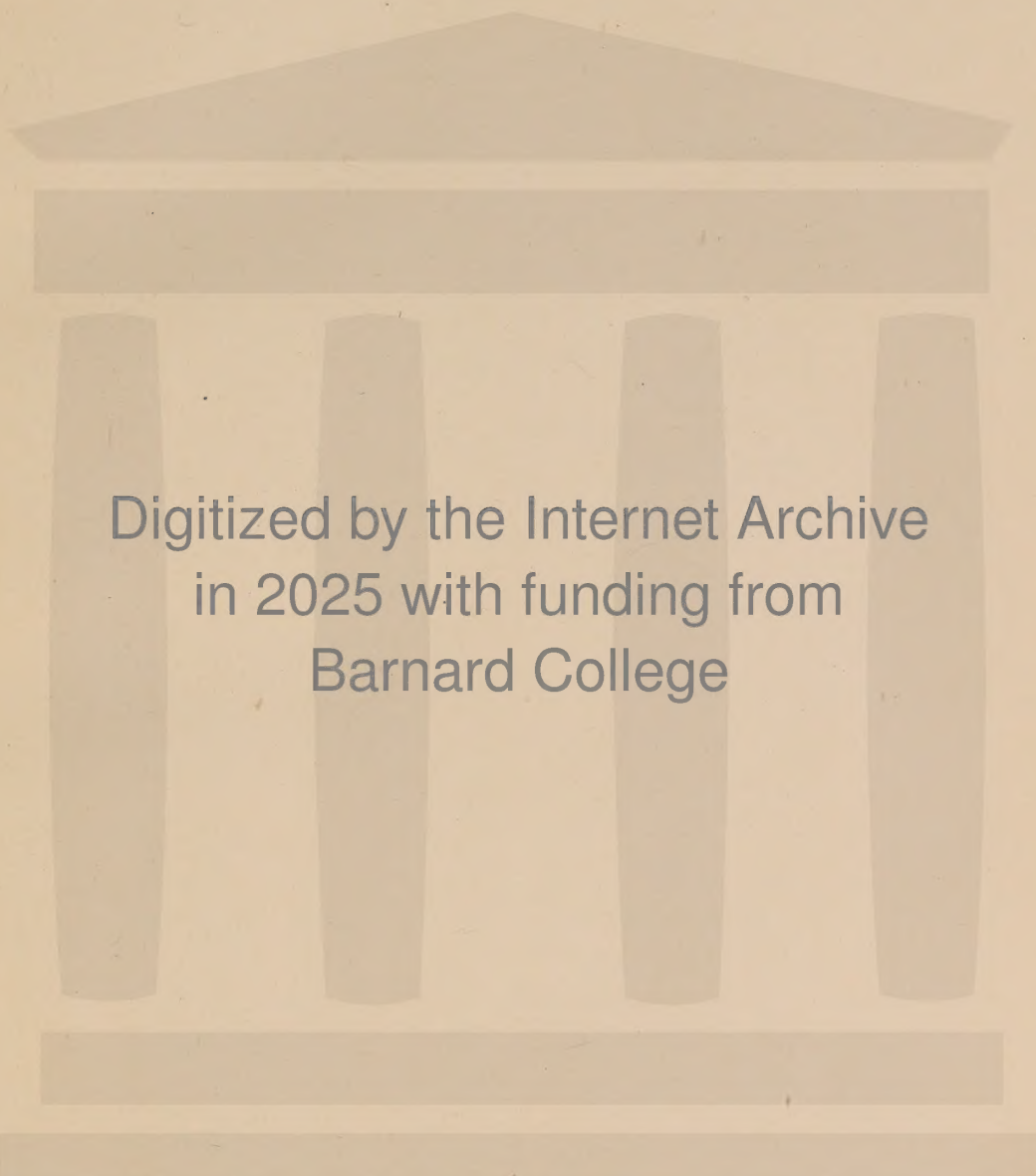
Columbia University
Bulletin of Information

BARNARD COLLEGE

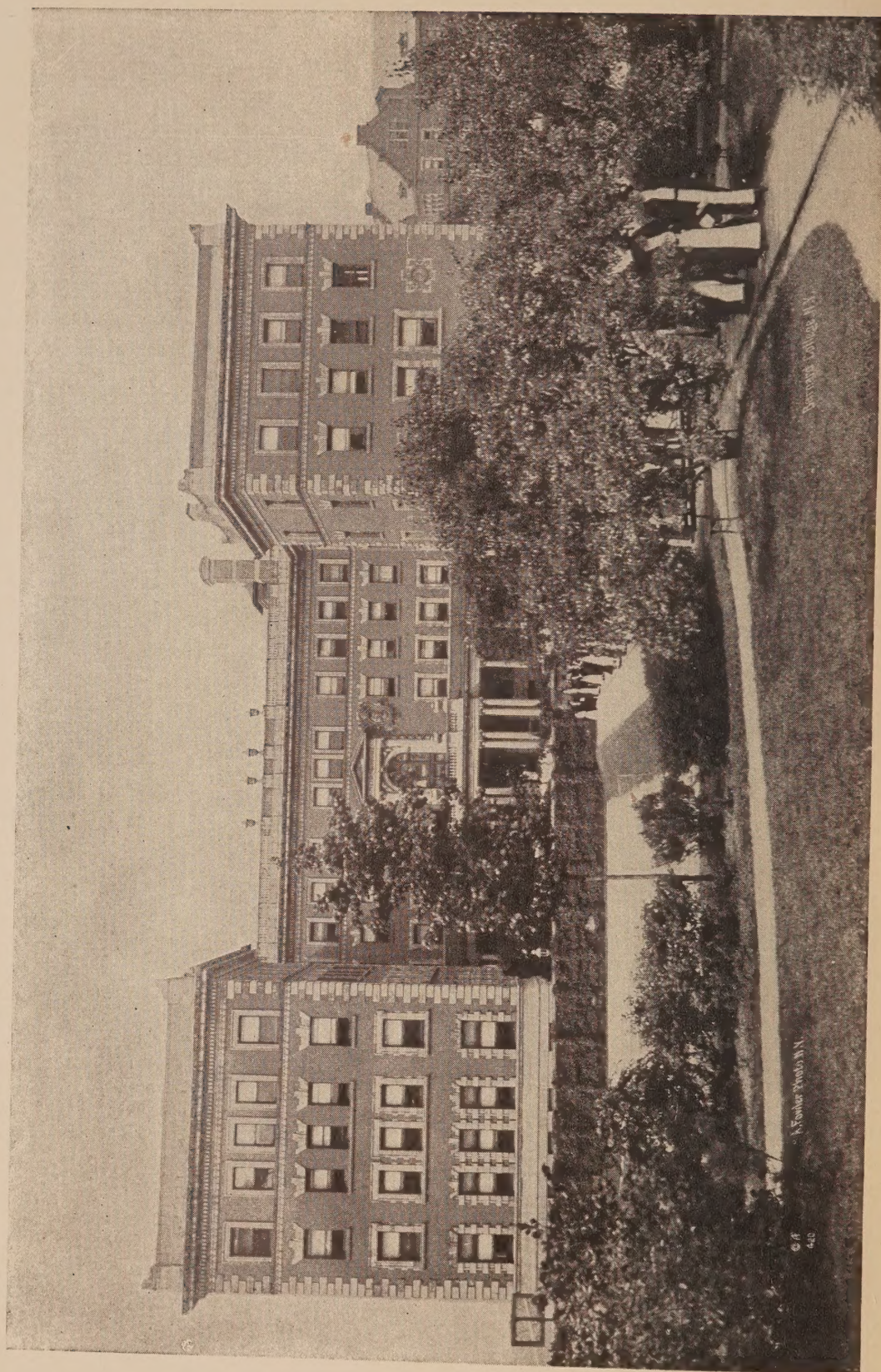
ANNOUNCEMENT

1915-1916

RETURN THIS BLANK
TO THE
REGISTRAR OF
TEACHERS COLLEGE.



Digitized by the Internet Archive
in 2025 with funding from
Barnard College



FISKE HALL

MILBANK HALL

BRINCKERHOFF HALL



Columbia University
Bulletin of Information

BARNARD COLLEGE

ANNOUNCEMENT

1915-1916

April, 1915

TABLE OF CONTENTS

	PAGE
TRUSTEES	6
STANDING COMMITTEES	7
ASSOCIATE MEMBERS	8
FOUNDERS.	9
FACULTY	10
OTHER OFFICERS OF INSTRUCTION	11
OFFICERS OF THE UNIVERSITY WHO GIVE INSTRUCTION IN BARNARD	
COLLEGE	12
STANDING COMMITTEES OF THE FACULTY	13
OFFICERS OF ADMINISTRATION	13
RELATION OF BARNARD COLLEGE TO COLUMBIA UNIVERSITY	14
GENERAL STATEMENT	16
Courses of Study	16
Academic Discipline	16
ADMISSION TO THE FRESHMAN CLASS	17
Examination and School Record	17
Certificate of Character	17
Certificate of Health	17
Preliminary Application for Admission	18
Subjects Required for Admission	18
Time and Place of Entrance Examinations	20
Application for Examination	21
Examination Fee	21
Special Examinations	22
Schedule of Examinations	22
Substitutes for the Board or Barnard Examinations	25
State Education Department Examinations	25
Summer Session Work in Lieu of Entrance Examinations	27
Entrance Conditions and Probation	27
ADMISSION TO ADVANCED STANDING	28
ADMISSION AS SPECIAL STUDENTS	29

	PAGE
DEFINITIONS OF REQUIREMENTS IN EACH SUBJECT	30
Submission of Note-books, Drawings, etc.	51
REGISTRATION AND ENROLMENT	52
Leave of Absence	53
Honorable Dismissal	53
GENERAL STATEMENT REGARDING FEES AND THE REGULATIONS	
GOVERNING THEIR PAYMENT	53
Withdrawal	54
Fees	54
Fees of State Scholars	54
Dormitory Fees	55
Estimated Necessary Expenses	55
THE PROGRAM OF STUDIES	55
Program of Studies for the Degree of Bachelor of Arts	58
Program of Studies for the Degree of Bachelor of Science	59
General Two-Years' Course, not Leading to a Barnard Degree	59
Courses in the Graduate Faculties and Professional Schools Open to Barnard Students	60
ADVICE TO STUDENTS	63
GENERAL REGULATIONS REGARDING EXAMINATIONS IN COURSE, CREDIT, AND ADVANCEMENT	64
SCHOLARSHIPS	65
GRADUATE FELLOWSHIP	70
PRIZES	70
HONORS	72
RESIDENCE HALL	73
HEALTH AND PHYSICAL TRAINING	74
UNIVERSITY LIBRARY	74
PUBLIC LECTURES	75
UNIVERSITY PRESS BOOK STORE	75
CHAPEL SERVICE	75
STUDENT ORGANIZATIONS	75
STATISTICS	76

CONTENTS

5

PAGE

DEPARTMENTAL STATEMENTS	77
Introductory Science	78
Anthropology	78
Astronomy	79
Botany	79
Chemistry	81
Classical Philology	82
Economics and Social Science	86
Education	87
English	87
Fine Arts and Architecture	90
Geology	92
Germanic Languages and Literatures	93
History	96
Mathematics	97
Mineralogy	98
Music	98
Philosophy and Psychology	99
Physical Education	101
Physics	102
Politics	103
Religion	103
Romance Languages and Literatures	103
Zoölogy	105
SCHEME OF ATTENDANCE	108
ACADEMIC CALENDAR	112
INDEX	114

Chairman

Vice-Chairman

Clerk

Treasurer

SILAS B. BROWNELL, LL.D.	322 West 56th St.
Mrs. JOSEPH H. CHOATE	8 East 63d St.
Mrs. ALFRED MEYER	785 Madison Ave.
GEORGE A. PLIMPTON	61 Park Ave.
Mrs. JAMES TALCOTT	7 West 57th St.
Mrs. HENRY FAIRFIELD OSBORN	850 Madison Ave.
Mrs. A. A. ANDERSON	Greenwich, Conn.
EDWARD W. SHELDON	46 Park Ave.
The Very Rev. WILLIAM M. GROSVENOR, D.D., The Deanery, St. John the Divine	
FREDERIC B. JENNINGS	86 Park Ave.
Mrs. HENRY N. MUNN	281 Lexington Ave.
NICHOLAS MURRAY BUTLER, Ph.D., Jur.D., LL.D. (Cantab.), D. Litt., (Oxon.)	Columbia University
ALBERT G. MILBANK	49 Wall St.
Miss CLARA B. SPENCE	26 West 55th St.
HOWARD TOWNSEND	27 Cedar St.
Mrs. GINO C. SPERANZA	Irvington, N. Y.
JOHN G. MILBURN	54 Wall St.
GEORGE L. RIVES	69 East 79th St.
Miss CHARLOTTE S. BAKER	26 West 55th St.
HORACE W. CARPENTIER	108 East 37th St.
PIERRE JAY	62 Cedar St.
Mrs. CHARLES CARY RUMSEY	Wheatley Hills, Glen Head, N. Y.
Mrs. OGDEN MILLS REID	35 West 53d St.
Mrs. HERBERT PARSONS	115 East 72d St.
(Alumnæ Trustee 1911-1915)	

STANDING COMMITTEES

1915

NOTE.—The date after each name indicates the expiration of term of office.

Executive Committee

Mr. BROWNELL, *Chairman*

Mrs. ANDERSON, *Vice-Chairman*

Mr. JENNINGS, *Clerk*

Dr. GROSVENOR (1915) Mr. JAY (1916) Mr. MILBURN (1917)

Mrs. RUMSEY (1915) Mrs. SPERANZA (1916) Mrs. REID (1917)

THE PRESIDENT AND THE TREASURER (ex-officio)

Committee on Finance

Mr. RIVES, *Chairman*

Mr. JAY

Mr. MILBANK

THE CHAIRMAN OF THE BOARD OF TRUSTEES (ex-officio)

Committee on Buildings and Grounds

Miss BAKER, *Chairman*

Mrs. REID

Mrs. RUMSEY

THE PRESIDENT AND THE CHAIRMAN OF THE BOARD OF TRUSTEES
(ex-officio)

Committee on Education

Miss SPENCE, *Chairman*

Mr. MILBURN

Mrs. SPERANZA

THE PRESIDENT AND THE CHAIRMAN OF THE BOARD OF TRUSTEES
(ex-officio)

ASSOCIATE MEMBERS

Mrs. ROBERT ABBE.....	11 West 50th St.
Mrs. W. REIERSON ARBUTHNOT.....	40 Princes Gate, London, England
Mrs. FREDERICK P. BELLAMY.....	260 Henry St., Brooklyn
Miss HELEN DAWES BROWN.....	106 East 52d St.
Mrs. WILLIAM ADAMS BROWN.....	Princeton, N. J.
Mrs. WILLIAM H. CARPENTER.....	417 West 117th St.
Mrs. HENRY CLEWS.....	27 West 51st St.
Miss HELEN GRAY CONE.....	51 East 90th St.
Mrs. ARTHUR M. DODGE.....	563 Park Ave.
Mrs. JOHN FRENCH.....	279 Madison Ave.
Miss JEANNETTE L. GILDER.....	100 East 17th St.
Mrs. ALMON GOODWIN.....	128 West 59th St.
Mrs. JAMES J. GOODWIN.....	11 West 54th St.
Mrs. ARNOLD HAGUE.....	1724 I St., Washington, D. C.
Mrs. H. O. HAVEMEYER.....	1 East 66th St.
Mrs. ALFRED F. HESS.....	16 West 86th St.
Mrs. HENRY HOLT.....	711 Madison Ave.
Mrs. ALFRED M. HOYT.....	934 Fifth Ave.
Mrs. M. L. KELLNER.....	3 Mercer Circle, Cambridge, Mass.
Mrs. SETH LOW.....	30 East 64th St.
Mrs. GEORGE McANENY.....	19 East 47th St.
Mrs. FREDERICK P. OLCOTT.....	4 East 53d St.
Mrs. SAMUEL T. PETERS.....	117 East 37th St.
Mrs. ISAAC L. RICE.....	Hotel Ansonia
Mrs. C. A. RUNKLE.....	328 West 57th St.
Mrs. RUSSELL SAGE.....	604 Fifth Ave.
Mrs. JACOB H. SCHIFF.....	965 Fifth Ave.
Miss AGATHE SCHURZ.....	24 East 91st St.
Mrs. CHARLES STEWART SMITH.....	25 West 47th St.
Mrs. JAMES SPEYER.....	1058 Fifth Ave.
Miss HELEN O. PHELPS STOKES.....	230 Madison Ave.
Mrs. ALGERNON SYDNEY SULLIVAN.....	16 West 111th St.
Mrs. RODERICK TERRY.....	Newport, R. I.
Mrs. FREDERICK FERRIS THOMPSON.....	283 Madison Ave.
Miss AMY TOWNSEND.....	Colony Club
Mrs. SCHUYLER VAN RENSSELAER.....	9 West 10th St.
Mrs. HENRY VILLARD.....	540 Park Ave.
Mrs. CHARLES W. WATSON.....	500 Madison Ave.
Mrs. EVERETT P. WHEELER.....	150 East 72d St.
Miss ALICE WILLIAMS.....	Weedsport, N. Y.
Mrs. WILLIAM B. WOOD.....	33 West 47th St.

FOUNDERS

[Any donor of not less than \$5000 will be enrolled among the founders
of Barnard College.]

JACOB H. SCHIFF
 Mrs. JAMES J. GOODWIN
 JAMES TALCOTT
 In the name of
 JOSIAH M. FISKE
 Mrs. SETH LOW
 *Mrs. C. B. HACKLEY
 *JOSEPH B. BLOOMINGDALE
 *J. PIERPONT MORGAN
 *Mrs. ESTHER HERRMAN
 Mrs. H. O. HAVEMEYER
 Mrs. FREDERICK P. OLCOTT
 Mrs. W. REIERSON ARBUTHNOT
 Miss OLIVIA E. PHELPS STOKES
 *Mrs. J. S. T. STRANAHAN
 JOHN D. ROCKEFELLER
 Mrs. CORNELIUS VANDERBILT
 Mrs. JOSEPH H. CHOATE
 OLIVER H. PAYNE
 Mrs. A. A. ANDERSON
 *Mrs. VAN WYCK BRINCKERHOFF
 Miss EMILY H. BOURNE
 SETH LOW, LL.D.
 *Miss EMILY O. GIBBES
 Mrs. JAMES TALCOTT
 In the name of
 LAZARUS STRAUS
 *JOSEPH PULITZER
 * Deceased.

JEFFERSON SELIGMAN
 Mrs. JABEZ A. BOSTWICK
 FREDERIC B. JENNINGS
 JOHN D. ARCHBOLD
 *Miss MATILDA W. BRUCE
 ISAAC GUGGENHEIM
 Mrs. HENRY FAIRFIELD OSBORN
 *J. HENRY SMITH
 LOUIS STERN
 WILLIAM K. VANDERBILT
 *WILLIAM ZIEGLER
 Mrs. JOHN S. KENNEDY
 *Mrs. GEORGE WHITFIELD COLLORD
 Estate of
 ELEANOR BUTLER SANDERS
 Miss CLARA B. SPENCE
 *JOHN S. KENNEDY
 *Mrs. LUTHER G. TILLOTSON
 JOSEPH EASTMAN
 HORACE W. CARPENTIER
 Estate of
 Mrs. WILLIAM MOIR
 Mrs. CHARLES WOERISHOFFER
 Mrs. CLINTON OGILVIE
 Mrs. E. HENRY HARRIMAN
 Mrs. C. B. CROCKER
 Mrs. MARIA HALL WILLIAMSON

THE FACULTY

NICHOLAS MURRAY BUTLER, Ph.D., Jur.D., LL.D. (Cantab.), D.Litt. (Oxon.), *President*

VIRGINIA CROCHERON GILDERSLEEVE, Ph.D., *Dean and Professor of English*

WILLIAM T. BREWSTER, A.M., *Provost and Professor of English*

EDWARD DELAVAN PERRY, Ph.D., LL.D., *Jay Professor of Greek*

FRANKLIN HENRY GIDDINGS, Ph.D., LL.D., *Professor of Sociology and the History of Civilization*

HAROLD JACOBY, Ph.D., *Rutherford Professor of Astronomy*

JAMES RIGNALL WHEELER, Ph.D., LL.D., *Professor of Greek Archaeology and Art*

¹ FRANK N. COLE, Ph.D., *Professor of Mathematics*

JAMES HARVEY ROBINSON, Ph.D., *Professor of History*

CALVIN THOMAS, LL.D., *Gebhard Professor of the Germanic Languages and Literatures*

² WILLIAM P. TRENT, M.A., LL.D., D.C.L., *Professor of English Literature*

² HERBERT GARDINER LORD, A.M., *Professor of Philosophy*

NELSON GLENN MCCREA, Ph.D., *Anthon Professor of the Latin Language and Literature*

HENRY E. CRAMPTON, Ph.D., *Professor of Zoölogy*

CHARLES KNAPP, Ph.D., *Professor of Classical Philology*

HENRY L. MOORE, Ph.D., *Professor of Political Economy*

HERBERT MAULE RICHARDS, Sc.D., *Professor of Botany*

MARGARET E. MALTBY, Ph.D., *Associate Professor of Physics*

² LOUIS AUGUSTE LOISEAUX, B.S., *Associate Professor of the Romance Languages and Literatures*

JAMES T. SHOTWELL, Ph.D., *Professor of History*

GEORGE WILLIS BOTSFORD, Ph.D., *Professor of History*

EDWARD KASNER, Ph.D., *Professor of Mathematics*

WILLIAM P. MONTAGUE, Ph.D., *Associate Professor of Philosophy*

³ GRACE A. HUBBARD, A.M., *Associate Professor of English*

² MARIE REIMER, Ph.D., *Associate Professor of Chemistry*

ADAM LEROY JONES, Ph.D., *Director of University Admissions*

² HENRY RAYMOND MUSSEY, Ph.D., *Associate Professor of Economics*

RAYMOND WEEKS, Ph.D., *Professor of the Romance Languages and Literatures*

WILHELM ALFRED BRAUN, Ph.D., *Associate Professor of the Germanic Languages and Literatures*

TRACY ELLIOT HAZEN, Ph.D., *Assistant Professor of Botany*

RAYMOND C. OSBURN, Ph.D., *Assistant Professor of Zoölogy*

¹ Absent on leave first half-year

² Absent on leave second half-year

³ Absent on leave 1915-16.

FACULTY

II

JOHN LAWRENCE GERIG, Ph.D., *Associate Professor of Celtic*
LA RUE VAN HOOK, Ph.D., *Associate Professor of Classical Philology*
CHARLES SEARS BALDWIN, Ph.D., *Professor of Rhetoric and English Com-
position*
ROBERT E. CHADDOCK, Ph.D., *Associate Professor of Statistics*
DAVID SAVILLE MUZZEY, Ph.D., *Associate Professor of History*
GERTRUDE M. HIRST, Ph.D., *Assistant Professor of Classical Philology*
IDA H. OGILVIE, Ph.D., *Assistant Professor of Geology*
HENRI F. MULLER, B.ès L., Ph.D., *Assistant Professor of the Romance Lan-
guages and Literatures*
HARRY L. HOLLINGWORTH, Ph.D., *Assistant Professor of Psychology*
MABEL FOOTE WEEKS, A.B., *Associate in English*

Other Officers of Instruction

EMILY JAMES PUTNAM, A.B., *Associate in History*
ELEANOR KELLER, A.M., *Instructor in Chemistry*
PAULINE HAMILTON DEDERER, A.M., *Instructor in Zoölogy*
MARION E. LATHAM, A.M., *Instructor in Botany*
ALLEN WILSON PORTERFIELD, Ph.D., *Instructor in the Germanic Languages
and Literatures*
MAUDE ALINE HUTTMANN, Ph.D., *Instructor in History*
GRACE LANGFORD, S.B., *Instructor in Physics*
LOUISE HOYT GREGORY, Ph.D., *Instructor in Zoölogy*
JULIANA S. HASKELL, Ph.D., *Instructor in the Germanic Languages and
Literatures*
HAROLD B. CURTIS, Ph.D., *Instructor in Mathematics*
WILLIAM HALLER, A.M., *Instructor in English*
WILLIAM S. MESSER, A.M., *Instructor in Classical Philology*
LUTHER HERBERT ALEXANDER, Ph.D., *Instructor in the Romance Languages
and Literatures*
CLARE M. HOWARD, Ph.D., *Instructor in English*
EMILIE J. HUTCHINSON, A.M., *Instructor in Economics*
GOTTLIEB AUGUSTUS BETZ, Ph.D., *Instructor in the Germanic Languages
and Literatures*
GEORGE WALKER MULLINS, A.M., *Instructor in Mathematics*
ETHEL STURTEVANT, A.M., *Instructor in English*
HARRY TODD COSTELLO, Ph.D., *Instructor in Philosophy*
GRACE H. GOODALE, A.B., *Lecturer in Classical Philology*
RUTH RAEDER MOOK, A.M., *Lecturer in Geology*
ESTELLE H. DAVIS, *Lecturer in English*
MINOR W. LATHAM, A.M., *Lecturer in English*
CHARLES C. MOOK, A.M., *Lecturer in Geology*
MADELEINE HENRIETTE DOBY, B.ès L., *Lecturer in the Romance Lan-
guages and Literatures*

LAURA C. BRANT, A.M., *Assistant in Physics*
 MARY WOTHERSPOON STEWART, A.B., *Assistant in Botany*
 VIOLA TURCK, A.B., *Assistant in Chemistry*
 LAURA B. HATCH, M.S., *Assistant in Geology*
 FLORENCE DE LOISELLE LOWTHER, A.B., *Assistant in Zoölogy*
 JENNIE TILT, M.S., *Assistant in Chemistry*
 ISABEL MCKENZIE, A.M., *Assistant in History*
 ALICE PAGE NELSON WALLER, A.B., *Assistant in History*
 _____, *Assistant in Philosophy*

Officers of the University Who Give Instruction in Barnard College

¹ FRANZ BOAS, Ph.D., LL.D., Sc.D., *Professor of Anthropology*
 FRANKLIN THOMAS BAKER, Litt.D., *Professor of the English Language and Literature*
 CLARENCE H. YOUNG, Ph.D., *Professor of Greek*
² HENRY ROGERS SEAGER, Ph.D., *Professor of Political Economy*
 WILLIAM ROBERT SHEPHERD, Ph.D., *Professor of History*
 VLADIMIR G. SIMKHOVITCH, Ph.D., *Professor of Economic History*
 DANIEL JORDAN, B.S., Pd.B., *Assistant Professor of the Romance Languages and Literatures*
 CHARLES A. BEARD, Ph.D., *Professor of Politics*
 ALGERNON DE V. TASSIN, A.M., *Assistant Professor of English*
 GEORGE PHILIP KRAPP, Ph.D., *Professor of English*
 WILLYSTINE GOODSSELL, Ph.D., *Assistant Professor of the History of Education*
 A. ARTHUR LIVINGSTON, Ph.D., *Assistant Professor of the Romance Languages and Literatures*
 EDGAR H. STURTEVANT, Ph.D., *Assistant Professor of Classical Philology*
 DINO BIGONGIARI, A.B., *Assistant Professor of the Romance Languages and Literatures*
 ERNEST H. WRIGHT, Ph.D., *Assistant Professor of English*
 MARY THEODORA WHITLEY, Ph.D., *Assistant Professor of Educational Psychology*
 ROSCOE GUERNSEY, Ph.D., *Instructor in Classical Philology*
 EDWARD J. FORTIER, A.B., *Instructor in the Romance Languages and Literatures*
 LOUIS IMBERT, A.M., *Instructor in Spanish*
 JOHN R. CRAWFORD, A.M., *Instructor in Roman Archaeology*
 CHARLES A. FISCHER, Ph.D., *Instructor in Mathematics*
 MARY PORTER BEEGLE, B.S., *Instructor in Physical Education*
 ARTHUR WHITTIER MACMAHON, A.B., *Instructor in Politics*
 FRANK MICHAEL DEBATIN, A.M., *Instructor in Classical Philology*
 HERBERT N. SHENTON, A.M., *Assistant in Sociology*

¹ Absent on leave first half-year

² Absent on leave second half-year

Barnard Representatives on the University Council

The DEAN (*ex-officio*), the PROVOST (*ex-officio*), and Professor CRAMPTON (serving until June, 1915).

Barnard Representatives on the University Committee on Undergraduate Admissions

Professors JONES, *chairman*, and VAN HOOK, Dr. HUTTMANN, and Dr. HOWARD.

Standing Committees of the Faculty

COMMITTEE ON INSTRUCTION: The PROVOST, *chairman*, Professors CRAMPTON, HENRY R. MUSSEY, RAYMOND WEEKS, OGILVIE, DAVID S. MUZZEY, COLE, and RICHARDS, and the DEAN (*ex-officio*)

COMMITTEE ON SCHOLARSHIPS: The DEAN, *chairman*, Professor HIRST, Miss DEDERER, and Miss HUTCHINSON, and the PROVOST (*ex-officio*)

COMMITTEE ON HONORS: Professors MALTBY, *chairman*, and HOLLINGWORTH, and Dr. GREGORY, and the DEAN and the PROVOST (*ex-officio*)

COMMITTEE ON STUDENT ORGANIZATIONS: The DEAN, *chairman*, Miss WEEKS, Professors BALDWIN, HUBBARD, and HIRST, and the PROVOST (*ex-officio*)

Officers of Administration

N. W. LIGGETT, A.B., *Bursar*

ANNA E. H. MEYER, A.B., *Registrar*

KATHARINE S. DOTY, A.M., *Secretary*

VIRGINIA TUCKER BOYD, A. B., *Chief Clerk*

MABEL FOOTE WEEKS, A.B., *Mistress of Brooks Hall*

MARY MACCOLL, A.B., *Secretary of Brooks Hall*

BERTHA L. ROCKWELL, *Librarian of Barnard College*

DEAN PUTNAM LOCKWOOD, Ph.D., *Acting Librarian of the University*

FREDERICK A. GOETZE, M.Sc., *Comptroller*

Rev. RAYMOND C. KNOX, B.D., *Chaplain of the University*

WILLIAM H. MCCASTLINE, M.D., *University Medical Officer*

THE RELATION OF BARNARD COLLEGE TO COLUMBIA UNIVERSITY

According to the agreement made January 19, 1900, between the Trustees of Columbia College in the City of New York and Barnard College, for the purpose of incorporating Barnard College, a college for women, in the educational system of the University, it is provided:

That the President of the University shall be, *ex-officio*, President of Barnard College and a Trustee of Barnard College. He shall preside at the meetings of the Faculty of Barnard College and shall have general supervision and direction of the educational administration of such College as in the other schools of the University.

That the internal administration of Barnard College shall be conducted by a Dean and a Provost who shall be appointed by the President of the University, by and with the advice and consent of the Trustees of Barnard College. In the absence of the Dean or the Provost, an Acting Dean or an Acting Provost may be appointed by the President.

That Barnard College shall be represented in the University Council of Columbia University by its Dean and its Provost, who shall have the right to vote in the University Council upon all questions. The Faculty of Barnard College shall consist of the President, the Dean, the Provost, and all the professors on the staff of the University who give instruction in Barnard College.

That Barnard College shall provide for and maintain such officers of instruction as may, from time to time, be agreed on. Such officers shall be nominated by the Dean of Barnard College, on consultation with the Provost, and with the approval of the Trustees of Barnard College and of the President of the University, and shall be appointed and reappointed by the University according to its custom. Their standing shall be the same in all respects as that of other like officers in the University. For all services rendered in the University by officers so appointed, an equivalent amount of service shall be rendered in Barnard College by other officers of the University of like grade, as may be determined from time to time, with the consent of the officers concerned, by the Dean of the College, on consultation with the Provost, and the President of the University.

That members of the Faculty of Barnard College may be either men or women.

That on and after July 1, 1904, all of the undergraduate instruction for women shall be given separately in Barnard College. Barnard College will assume as rapidly as possible all of the instruction for women in the senior year, without regard to the time limit contained in this section, and undertakes to maintain every professorship established at its instance so long as the services of the incumbent thereof or an equivalent therefor

shall be rendered in Barnard College; and when Barnard College has adequately provided for its undergraduate work, it will, as its means allow, establish additional professorships in the University, upon foundations, providing for courses which shall be open to men and women, to the end that opportunities for higher education may be enlarged for both men and women.

That the University will accept women who have taken their first degree on the same terms as men, as students of the University, and as candidates for the degrees of Master of Arts and Doctor of Philosophy under the Faculties of Philosophy, Political Science, and Pure Science, in such courses as have been or may be designated by these Faculties, with the consent of those delivering the courses, and will make suitable provision for the oversight of such women.

That the University will confer the degree of Bachelor of Arts or Bachelor of Science upon any student of Barnard College who shall have satisfactorily fulfilled in Barnard College the requirements of the University Statutes for that degree. The courses in Barnard College leading to the degree of Bachelor of Arts or Bachelor of Science shall be determined and administered by its own Faculty, and all examinations for admission to Barnard College and in course shall be conducted under the authority of the Faculty of Barnard College. The diploma shall be signed by the President of the University and by the Dean of Barnard College. The degrees conferred upon the graduates of Barnard College shall be maintained at all times as of equal value with the corresponding degrees conferred upon the graduates of Columbia College. The equivalency of the two degrees shall be maintained in such manner as the University Council may prescribe.

That, so long as this agreement is in force, Barnard College shall grant no degrees. It shall retain the right to grant certificates to students not candidates for a degree, and it shall exercise all other corporate rights and powers which are not delegated to the University by this agreement. But this agreement shall not be deemed a surrender by Barnard College of any powers conferred upon it by charter.

That Barnard College shall retain its separate corporate organization, and that the Trustees of Barnard College shall continue to provide for the financial support thereof.

That the library of the University shall be open to all women students of the University and of Barnard College upon the same terms as to men.

The opportunities open in other schools of the University to students of Barnard College who wish to avail themselves of the advantage of professional training are explained in detail on pages 60-63.

Barnard College

GENERAL STATEMENT

Barnard College offers two distinct liberal courses of undergraduate instruction for women, each of four years' duration, but differing widely in aim and leading to different degrees.

Courses of Study The literary course requires the study of Latin or Greek for entrance and also in college, embraces such general subjects as are deemed essential to a liberal education, requires a major subject equivalent to a three-hour course throughout three years, and leads to the degree of Bachelor of Arts.

The science course allows the substitution of scientific and advanced subjects in place of the entrance Latin or Greek, embraces such general courses as are considered essential to any liberal education, requires a major and two minor subjects in pure science amounting to seventy points of college work, and leads to the degree of Bachelor of Science.

A general two-years' course, not leading to a Barnard degree, is arranged to give the cultural basis in literature, languages, history, and natural science for work in certain professional schools of the University. (See p. 59.)

Under the statutes all students are admitted subject to the disciplinary power of the University.

Academic Discipline The College makes all possible provision for safeguarding the health of its students; and it reserves the right to require the withdrawal of any student whose health, in the opinion of the University Medical Officer, does not warrant her continuing her college course.

Students who are not residing in Brooks or Whittier Hall, or with their parents, must have their places of residence approved by the Dean before making final arrangements.

ADMISSION

Admission to Barnard College is obtained only by examination, except that in suitable cases the certified credentials of degree-granting institutions may be accepted for the subjects or parts of subjects which they cover.

Except for reasons of weight, candidates for admission to the freshman class must be at least fifteen years of age at the time of matriculation; candidates for admission to advanced standing must be correspondingly older. Every candidate must, before admission, present a certificate of good moral character from her last teacher, or from some properly qualified citizen. Students from other colleges or universities must present certificates of honorable dismissal.

Information regarding admission may be obtained in person, or by mail or telephone, from the Secretary of Barnard College.

ADMISSION TO THE FRESHMAN CLASS

In order to enter the freshman class a candidate must satisfy the College as to:

1. Adequate preparation in the subjects required for admission (p. 18);
2. The possession of the qualities of mind and character deemed requisite for the most profitable pursuit of a college course;
3. Sound health.

It should be clearly understood that the satisfaction of any one or two of these requirements alone does not entitle the candidate to admission.

1. Evidence of adequate preparation in the subjects required for admission must be: examination and school record.

The following examinations may be offered in partial fulfilment of the requirements for admission: those given by the College Entrance Examination Board (p. 20), by Columbia University (p. 20), and, under certain conditions, those given by the Education Department of the State of New York or by other colleges (see p. 25).

The results of a candidate's examinations may stand to her credit for twenty-nine months but no longer.

She may not present herself at more than four series of examinations except by special permission of the Committee on Admissions.

In making application for examination a candidate must file with the Secretary of Barnard College, for the use of the Committee on Admissions, a statement from the principal of her school or from her last instructor indicating the extent and character of her preparation in each subject in which she applies for examination. The Committee on Admissions may withhold credit when this requirement is not met, and will give weight, in estimating the results of the candidate's entrance examinations, to the record of her school performance. Blanks for school records may be obtained from the Secretary.

2. Evidence of the possession of the requisite moral and personal qualities may be: a confidential estimate of character and personality signed by an authorized representative of the candidate's former school testifying to the candidate's possession of a good moral character and of qualities which promise future usefulness of a high order. This estimate should be full and specific. It may be supplemented by letters from teachers and other responsible persons. All such certificates and letters should be sent by the writers directly to the Secretary.

Examination
and School
Record

Certificate
of Character

3. Evidence of sound health may be: an acceptable certificate from the candidate's family physician or from the University Medical Officer. In case of doubt an examination by the University Medical Officer will be required. The proper blanks may be obtained from the Secretary of Barnard College.

Health

Each student who plans to enter the College should file a preliminary application for admission with the Secretary at as early a date as possible. Barnard College is finding it necessary to limit the number of students admitted. It may be expected, therefore, that the requirements for admission will be administered with increasing strictness. Other things being equal, early applications will receive the preference.

SUBJECTS REQUIRED FOR ADMISSION

The requirement for admission to the freshman class is proficiency in fourteen and one-half ($14\frac{1}{2}$) units of secondary school subjects, of which some are prescribed and the remainder elective, as specified below. The unit implies the study of a subject for a time equivalent to five (5) periods a week for one (1) year.

	COUNTING IN UNITS
Candidates for the A.B. degree must offer:	
English, elementary (page 32).....	3
Mathematics, elementary (page 46).....	$2\frac{1}{2}$
Latin, elementary, 4 units (page 44), <i>or</i> Greek, elementary, 3 units (page 41)	4 <i>or</i> 3
Modern foreign languages (from Groups I and II), <i>or</i> Greek as second ancient language (page 41).	3
Elective subjects (from Groups I, II, III) to com- plete a total of $14\frac{1}{2}$ units.....	2 <i>or</i> 3
Candidates for the B.S. degree must offer:	
English, elementary (page 32).....	3
Mathematics, elementary (page 46).....	$2\frac{1}{2}$
Science (from Group III).....	2
¹ Intermediate or advanced subjects (from Group I, with which Latin 4 or 5 may be included, page 44)	2
¹ Modern foreign languages (from Groups I and II)	3
¹ Elective subjects (from Groups I, II, III)	2
Candidates for the general two-years' course must offer:	
English, elementary (page 32).....	3
Mathematics, elementary (page 46).....	$2\frac{1}{2}$
Ancient or modern foreign languages.....	4
History, foreign languages, mathematics, or science.....	5

¹ Intermediate French and German may be counted both as intermediate units and as units of modern foreign languages, if sufficient elective units are added to make the total of $14\frac{1}{2}$ entrance units.

Candidates for the two years' course who intend to transfer to the School of Journalism must offer:

	COUNTING IN UNITS
English, elementary (page 32).....	3
History, elementary (see note, page 42).....	2
Foreign languages (Groups I and II).....	4 or 5 or 6
in one of the following combinations:	
<i>a.</i> French, 4 units	
<i>b.</i> German, 4 units	
<i>c.</i> French, 2 units; German, 2 units	
<i>d.</i> French, 2 units; German, 3 units	
<i>e.</i> German, 2 units; French, 3 units	
<i>f.</i> French or German, 2 units; Latin, 4 units	
<i>g.</i> French or German, 3 units; Latin, 3 units	
Elective subjects (from Groups I, II, and III) to complete a total of 14½ units.....	5½ or 4½ or 3½

Group I

Candidates may offer any of the following subjects without other restriction than that to offer an intermediate or advanced subject will involve offering, either at the same time or earlier, the corresponding elementary subject:

	COUNTING IN UNITS
Elementary Greek (page 41).....	2 or 3
Elementary History (see note, page 42).....	2 or 1
Drawing (page 31).....	1
Music (page 47).....	1
Intermediate French (page 38).....	1
Intermediate German (page 39).....	1
¹ Advanced English (page 36).....	1
¹ Advanced Greek (page 41).....	1
¹ Advanced History (page 42).....	1
¹ Advanced Latin (page 45).....	1
Advanced Mathematics (page 46).....	½ or 1 or 1½

And, in the case of candidates for the B.S. degree, or for the two-years' course, or for the A.B. degree if they offer 3 units of Greek:

Elementary Latin (see note, page 44).....	2 or 3 or 4
---	-------------

And, in the case of candidates for the two-years' course preparatory to the School of Journalism:

Advanced French (see page 38).....	1
Advanced German (see page 41).....	1
Elementary Mathematics (see note, page 46).....	1 or 1½ or 2 or 2½

¹ Candidates will be examined in this subject only in January and in September.

EXAMINATIONS

Group II

Candidates for the A.B. or the B.S. degree may offer not more than 4 units in all and candidates for the general two-years' course may offer not more than 6 units in all from the four subjects following:

	COUNTING IN UNITS
Elementary French (page 37).....	2
Elementary German (page 39).....	2
¹ Italian (page 43).....	2
Spanish (page 49).....	2

Group III

Candidates for the A.B. degree may offer not more than 2 units and candidates for the B.S. degree must offer not less than 2 units in all from the five subjects following:

	COUNTING IN UNITS
Botany (page 30).....	1
Chemistry (page 31).....	1
Physics (page 48).....	1
Physiography (page 49).....	1
Zoölogy (page 49).....	1

ENTRANCE EXAMINATIONS²

Examinations for admission to Barnard College are held each year in January, June, and September, and, under certain circumstances, in May. In 1915 they will be held June 14-19 and September 20-25, and in 1916, January 20-26 and June 19-24.

In June, 1915 and 1916, the entrance examinations will be conducted by the College Entrance Examination Board, of which Columbia University is a member, at Barnard College and at a large number of widely distributed points. A list of these points will be published by the Board (Post-Office Sub-Station 84, New York, N. Y.) about March 1. Requests that the examinations be held at particular points should reach the Secretary of the Board not later than February 1.

In September, 1915, and January, 1916, the entrance examinations of Barnard College will be conducted by the Columbia University Committee on Undergraduate Admissions, and will be held only at the College.

¹ Candidates will be examined in this subject only in January and in September.

² Candidates who find that examinations are fixed for days set apart for religious purposes by the church to which they belong, and who are prevented by conscientious scruples from attending such examinations, are requested to make application to the Committee on Admissions through the Registrar of Barnard College for equitable relief. It should be noted, however, that in case alternative opportunities for taking a given examination are statedly offered, as for instance the January, June, and September entrance examinations, such students are expected to present themselves on the day which is not set apart as a holy day.

Every candidate for examination is required to file an application in advance for *each series of examinations which she wishes to take*. For the examinations in June, 1915, the application must be filed with the Secretary of the College Entrance Examination Board, Post-Office Sub-Station 84, New York, N. Y. Applications for examination in the United States east of the Mississippi River (also at points on the Mississippi River) must be filed on or before May 31. Applications for examination elsewhere in the United States or in Canada must be filed on or before May 24, and applications for examination at points outside of the United States and Canada must be filed on or before May 10. Requests for blank forms of application should be addressed to the Secretary of the Board.

Application
for
Examination

A candidate for a competitive scholarship to be awarded on the basis of the June examinations must, in her application to the Secretary of the College Entrance Examination Board, mention the scholarship for which she is competing.

For the examinations in September, 1915, and January, 1916, applications must be filed with the Registrar of Barnard College on or before September 13, and January 13, respectively. Requests for blank forms of application should be addressed to the Secretary of Barnard College.

Every application for examination in June must be accompanied by a fee of \$5 in the form of a postal order, express order, or draft on New York, to the order of the *College Entrance Examination Board*, for all candidates examined at points in the United States and Canada, and \$15 for all candidates examined at points outside of the United States and Canada.

Examination
Fee

Every application for examination in September or in January must be accompanied either by a fee of \$5 in the form of a postal order, express order, or draft on New York, to the order of *Barnard College*, by a receipt from the Bursar of Barnard College for an examination fee previously paid, or by the receipt issued by the Secretary of the College Entrance Examination Board for the June examinations immediately preceding. *The latter will be accepted in either September or January but not in both; and a single fee paid to the University will cover only two consecutive series of examinations, namely, January and September or September and January.*

If a late application is accepted either by the College Entrance Examination Board, or by the College, a second fee of \$5 must be paid.

The receipt for the examination fee must be carefully preserved by the candidate and shown (not surrendered) to the supervisor in charge of the examinations as evidence of her right to be admitted to the same. No candidate will be admitted to the September or January examinations upon the receipt of the College Entrance Examination Board, unless that receipt bears the certification of the Registrar of Barnard College that the candidate's application for the examinations has been filed.

EXAMINATIONS

Special entrance examinations in certain subjects may be held in May, under the management of the Columbia University Committee on Admissions, in schools whose terms close in May. Schools desiring these examinations should apply through the Secretary of Barnard College to the Committee on Admissions, which may, at its discretion, grant this privilege. The fee for each candidate for such a series of special examinations is \$10.

Special Examinations Candidates taking the examinations must report to the supervisor, in the examination room, fifteen minutes in advance of the first examination which they are to attend.

June 14-19, 1915

Monday, June 14

Mathematics <i>a</i> (elementary algebra complete).....	9-11
Mathematics <i>a</i> , i (algebra to quadratics).....	9-11
Mathematics <i>a</i> , ii (algebra, quadratics and beyond).....	11.15- 1
History <i>a</i> (ancient)	2-4
History <i>c</i> (English)	2-4
History <i>b</i> (mediæval and modern).....	4.15- 6.15
History <i>d</i> (American).....	4.15- 6.15

Tuesday, June 15

Mathematics <i>c</i> (plane geometry).....	9-11
Mathematics <i>d</i> (solid geometry).....	11.15- 1
German <i>a</i> (elementary).....	2-4
Physics.....	4.15- 6.15
Botany.....	4.15- 6.15
Zoölogy.....	4.15- 6.15

Wednesday, June 16

Latin 3 (second-year Latin).....	9-11
French <i>a</i> (elementary).....	2-4
German <i>b</i> (intermediate).....	4.15- 6.15
German <i>bc</i> (intermediate and advanced).....	4.15- 6.15
Spanish.....	4.15- 6.15

Thursday, June 17

Latin 4 (Cicero's <i>Manilian Law</i> and <i>Archias</i> , and sight translation of prose).....	9-11
Latin 6 (advanced prose composition).....	11.15- 1
Latin 5 (Vergil's <i>Æneid</i> , I, II, and IV or VI, and sight translation of poetry).....	2-4
French <i>b</i> (intermediate).....	4.15- 6.15
French <i>bc</i> (intermediate and advanced).....	4.15- 6.15

EXAMINATIONS

23

Friday, June 18

English 1 (grammar and composition).....	9-11
Greek <i>f</i> (prose composition).....	11.15- 1
Music <i>a</i> (musical appreciation).....	11.15- 1
English 2 (literature).....	2-4
English <i>b</i> (study and practice).....	2-4
Drawing.....	4.15- 6.15
Greek <i>b</i> (Xenophon's <i>Anabasis</i> , Books I-IV).....	4.15- 6.15
Mathematics <i>b</i> (advanced algebra).....	4.15- 6.15

Saturday, June 19

Chemistry.....	9-11
Geography.....	9-11
Greek <i>c</i> (Homer's <i>Iliad</i> , Books I-III).....	9-11
Music <i>b</i> (harmony).....	9-11
Greek <i>a</i> , i (grammar).....	11.15-12.15
Greek <i>a</i> , ii (elementary prose composition).....	12.15- 1
Greek <i>g</i> (sight translation of prose).....	2-4
Mathematics <i>f</i> (plane trigonometry).....	2-4

September 20-25, 1915, and January 20-26, 1916

Monday, September 20, and Thursday, January 20

Mathematics <i>a</i> , i (algebra to quadratics).....	9.30-11.30
Mathematics <i>a</i> , ii (quadratics and beyond).....	9.30-11.30
Mathematics <i>a</i> (elementary algebra, complete).....	9.30-12.30
History <i>d</i> (American).....	1.30- 3.30
Physics.....	3.45- 5.45
Botany.....	3.45- 5.45
Zoölogy.....	3.45- 5.45

Tuesday, September 21, and Friday, January 21

Mathematics <i>c</i> (plane geometry).....	9-11
Mathematics <i>d</i> (solid geometry).....	9-11
Mathematics <i>cd</i> (plane geometry and solid geometry).....	9-12
History <i>c</i> (English).....	1.30- 3.30
German <i>a</i> (elementary).....	3.45- 5.45

Wednesday, September 22, and Saturday, January 22

Latin 3 (second-year Latin).....	9-11
Mathematics <i>b</i> (advanced algebra).....	9-11
Greek <i>g</i> (sight translation of prose).....	9-11
French <i>a</i> (elementary).....	1.30- 3.30
German <i>b</i> (intermediate).....	3.45- 5.45

Thursday, September 23, and Monday, January 24

Friday, September 24, and Tuesday, January 25

Saturday, September 25, and Wednesday, January 26

Barnard College accepts in lieu of its entrance examinations or those of the College Entrance Examination Board¹ no credentials of any sort

¹ The numerical ratings of the Board are accepted by the College, but the passing mark is fixed by the Committee on Admissions.

except (1) the examination reports of the Education Department of the State of New York showing that the candidate has completed certain courses in a high school in the State of New York and that she has passed the examinations of the Education Department in these subjects (for table of equivalents, see below), (2) the official reports of entrance examinations taken in good faith for admission to other colleges, and (3) certain courses of the Summer Session of Columbia University (see p. 27). *These credentials are accepted only in so far as they cover specifically, and by name, subjects or lettered (or numbered) parts of a subject which are accepted for admission to Barnard College, and state in percentages the grades received in the examinations in such subjects.* Candidates must take the regular entrance examinations in the subjects in which their credentials are not deemed adequate. Except for reasons of weight credentials are not accepted as covering subjects passed more than twenty-nine months previous to the date at which the candidate intends to begin residence. No certificates from preparatory schools or from preparatory departments of colleges will be accepted in lieu of entrance examinations.

Substitutes
for the Board
or Barnard
Examina-
tions

In order to be credited towards entrance, the candidate's credentials, together with (1) the statement of the extent and character of her preparation in each subject offered (see School Record, page 17), and (2) any science note-books or drawings that she has to present, must be in the hands of the Committee on Admissions on or before September 20, 1915, for admission in September, and on or before January 31, 1916, for admission in February.

Candidates for admission on the credentials of the New York State Education Department should notify the Secretary of Barnard College of their intention at least six weeks prior to the opening of the term in September or in February, *i.e.*, on or before August 18, 1915, or December 24, 1915, in order that sufficient time may be allowed for obtaining their records from the Education Department.

State
Education
Department
Examinations

The subjects for which the State credentials are accepted and their value in Barnard entrance units are as follows:

	State Education Department counts	Barnard units
¹ Botany (Advanced Botany).....	5	1
¹ Chemistry.....	5	1
¹ Drawing, Elementary Design, and Elementary Representation.....	4	1

¹ Credit cannot be secured in these subjects unless the following requirements are met:
(a) In all natural sciences, laboratory note-books, duly certified by the teachers, must be presented in accordance with the regulations stated on page 51.
(b) In Drawing at least twenty (20) freehand drawings, duly certified by the teacher, must be presented in accordance with the regulations stated on page 51.
(c) In History only the five-count electives will be accepted.

	State Education Department counts	Barnard units
English, Four Years.....	13	3
French, Two Years.....	10	2
" Third Year.....	5	1
" Fourth Year (<i>for candidates for two-year course preparatory to School of Journalism</i>).....	5	1
German, Two Years.....	10	2
" Third Year.....	5	1
" Fourth Year (<i>for candidates for two-year course preparatory to School of Journalism</i>).....	5	1
Greek:		
Grammar and Composition.....	10	2
Second Year Greek.....		
Translation of Prose at Sight.....		
Third Year Greek.....	5	1
Advanced Prose Composition.....		
¹ History:		
¹ Ancient.....	5	1
¹ Modern, Parts I and II.....	6	1
¹ English.....	5	1
¹ American.....	5	1
Italian.....	10	2
Latin (<i>for candidates for A.B. course</i>):		
Third Year Latin (Latin 4).....	5	1½
Fourth Year Latin (Latin 5).....	5	1½
Advanced Prose Composition (Latin 6).....		1
Latin (<i>for candidates for B. S. or two-year course</i>):		
² Second Year Latin (Latin 3).....	10	2
² Third or Fourth Year Latin (Latin 4 or 5).....	5	1
Mathematics:		
Algebra.....	5	1
Intermediate Algebra.....	2	½
Plane Geometry.....	5	1
Solid Geometry.....	2	½
Plane Trigonometry.....	2	½
Advanced Algebra.....	3	½
¹ Physics.....	5	1
¹ Physiography.....	5	1
Spanish.....	10	2
¹ Zoölogy (Advanced Zoölogy).....	5	1

¹ Credit cannot be secured in these subjects unless the following requirements are met:

(a) In all natural sciences, laboratory note-books, duly certified by the teachers, must be presented in accordance with the regulations stated on page 51.

(b) In Drawing at least twenty (20) freehand drawings, duly certified by the teacher, must be presented in accordance with the regulations stated on page 51.

(c) In History only the five-count electives will be accepted.

² See note, page 44.

A grade of C in the following courses of the Summer Session of Columbia University will fulfill entrance requirements or remove entrance conditions in the subjects specified in each case:

Botany sI with sIA, if taken in two successive years—

for botany

Chemistry sA—for chemistry

French sA1, sA2, sA3—for elementary French

French sB1—for intermediate French

German sA1, sA2, sA3—for elementary German

German sB1 with sB2—for intermediate German

Italian sI with s2—for elementary Italian

Latin sZ—for advanced Latin prose composition

Mathematics sA1, sA2, sA5—for the corresponding parts of advanced mathematics

Physics sA—for physics

Spanish sI with s2—for elementary Spanish

Summer
Session Work
in Lieu of
Entrance
Examinations

A candidate for admission who has not secured the prescribed $14\frac{1}{2}$ units may be admitted to the freshman class with conditions, if, in the judgment of the Committee on Admissions, she is qualified to undertake the work of the class. General deficiency in any prescribed subject will disqualify for admission. Except for reasons of weight a student who has failed to complete a course in a good high school or preparatory school will not be admitted with conditions.

Entrance
Conditions
and
Probation

All entrance conditions must be removed within one calendar year from the date of entrance.

A student admitted conditionally or by credentials from another college or from the State Education Department will be held under probation during the first half-year of residence. By Tuesday of the week preceding the Thanksgiving holidays, each department in which students on probation attend will make to the Committee on Instruction a special report of progress in the case of every such student. The Dean, on the recommendation of the Committee on Instruction, will as soon as practicable after the mid-year examinations decide as to each student on probation whether she shall be admitted to full standing, have her period of probation extended, or be dropped from the roll.

The mark C, B, or A, obtained at the end of the first half-year of residence, in a course of a higher grade than the entrance requirement, will be regarded as removing an entrance condition in that subject, unless the condition was incurred in a part of the subject not directly involved in the work of the college course. To remove a condition by college work a mark of at least thirty-five per cent. must have been obtained in an entrance examination. Any condition not so removed must be satisfied by a regular entrance examination for which an application must be filed and a fee paid

precisely as required of a candidate for admission. (Regarding the removal of entrance conditions by work in the Summer Session of Columbia University, see page 27.)

While work done in University extension courses is not primarily accepted in lieu of entrance examinations, *entrance conditions* may be removed by a grade of at least C subsequently obtained in the appropriate extension courses. Students in college who desire to avail themselves of this privilege must submit their choice of extension courses for the approval of the Committee on Instruction as a part of their regular college work. (For the general regulations regarding the election of extension courses, see page 57.)

ADMISSION TO ADVANCED STANDING

A candidate for admission to advanced standing, either upon the basis of credentials from other colleges or on examination, must fill out the appropriate application blank to be obtained from the Secretary, and file it with the Barnard College Committee on Admissions by September 13, 1915, for admission in September, or by January 13, 1916, for admission in February. Each candidate must also present at that time (1) an official statement of her academic record including entrance credits, (2) an honorable dismissal from the college which she is leaving, (3) a marked catalogue of that college plainly showing every requirement for admission and every course of instruction with which she is credited, (4) a certificate signed by an authorized representative of that college testifying to her possession of a good moral character, and another letter from one of her instructors in regard to her character and scholarship, and (5) a certificate of sound health.

Every candidate for admission to advanced standing must show that she has attained proficiency in the equivalent of (1) the requirements for admission to the freshman class (see page 18); (2) all the prescribed studies already pursued by the class to which she seeks admission; (3) as many elective studies as she would have pursued if she had entered the class at the beginning of the freshman year.

She may be admitted notwithstanding deficiencies in some of these studies, but will not be recommended for a degree until she shall have brought all her studies up to the point required for that degree.

The credits granted in any subject to a student admitted with advanced standing may be withdrawn or diminished in amount, if, in pursuing such subject after admission to Barnard College, the student prove that the granting of the credits was wholly or in part unwarranted by her previous work.

No applicant may enter the senior class as a candidate for a degree after October 15 in any year, and no student will receive a degree who has resided less than two full half-years at Barnard College. (See also paragraph 11, page 56.)

Candidates for admission to the freshman class offering by examina-

tion more than the required $14\frac{1}{2}$ units may be given credit toward a degree for this extra work, on a basis to be determined by the Committee on Admissions, provided that not more than 18 of the 124 points required for a degree may be gained in this way.

ADMISSION AS SPECIAL STUDENTS

A candidate for admission as a special student must fill out the appropriate application blank to be obtained from the Secretary and file it with the Committee on Admissions by September 13, 1915, for admission in September, or by January 13, 1916, for admission in February.

Special students in Barnard College are of two classes: matriculated and non-matriculated.

Matriculated special students are women who wish, without taking a degree, to make a serious study of some subject or group of subjects. They must pass the regular examinations for admission to the freshman class and have full credit for fourteen and one-half ($14\frac{1}{2}$) units of the entrance requirements. (See p. 18.) They may, therefore, in event of a change of plan, be credited with such of their courses as may coincide with the courses leading to a degree.

Matriculated
Special
Students

Non-matriculated special students must be women of mature age who wish to pursue chiefly advanced courses of special study. They may be admitted at the discretion of the Committee on Admissions without passing formal entrance examinations; but they must furnish proof that they have at some time pursued the studies included in the matriculation examinations and must satisfy the requirements of the department that they desire to enter. *Candidates desiring to pursue merely elementary courses, as in languages, etc., will not be admitted as non-matriculated special students.*

Non-
Matriculated
Special
Students

Ordinarily no work done by a non-matriculated special student may count toward a degree.

Except for reasons of weight, satisfactory to the Committee on Admissions, no one will be received as a special student who is less than eighteen years of age, or who has, within ten months of the time of her application, either been rejected or become deficient as a regular student.

Once admitted to the college, special students will be allowed to select their own courses of study subject to the general approval of the Provost, on the recommendation of the Committee on Instruction, and to the particular approval, for each course selected, of the head of the department in which the course is given.

Each student is required to pursue in each half-year courses amounting to at least eight (8) points, unless excused by the Provost, on the recommendation of the Committee on Instruction, for reasons of special weight.

In the courses which they severally pursue all special students will be

held to the observance of the same regulations as to attendance, examination, proficiency, and deficiency as regular students.

All special students will receive a formal statement as to the satisfactory completion of the work that they have taken.

DEFINITIONS OF REQUIREMENTS¹

Specimens of the question papers set by Columbia University may be obtained from the Secretary upon application. The question papers of the College Entrance Examination Board are published annually in book form by Ginn & Company, Boston, Mass.

For a more detailed statement of the requirements in botany and physiography or lists of suitable laboratory experiments in chemistry and physics the reader is referred to the pamphlet of the College Entrance Examination Board containing definitions of the requirements in each subject.

BOTANY (counting one unit)

The candidate should have received training by means of the laboratory method in:

The structure and the more obvious features of the life history of at least ten types among the higher seed plants chosen from the more representative families (*e. g.*, Gramineæ, Liliaceæ, Salicaceæ, Ranunculaceæ, Rosaceæ, Leguminosæ, Cruciferae, Solanaceæ, Labiatae, Compositae). In addition to these, the following types are recommended among the remaining lower groups of plants: pine, *Selaginella*, a fern, a moss (*Polytrichum* or *Funaria*), a leafy hepatic, *Marchantia*—a mildew (*Microsphaera*), an agaric, *Vaucheria*, *Spirogyra*, and a protophyte (preferably *Sphaerella*).

Morphology of shoot, root, and seed. This work covers the growth, character, relation, and function of the more important tissues of the stem, leaf, bud, and root; together with a study of the more common variation of these organs. The work on the seed includes the structure and homologies of the principal types, nature of reserve food, the renewal of growth of the seed, and the development of the seedling.

Physiology. This work should cover the essential facts concerning irritability, photosynthesis, respiration, digestion, growth, and reproduction.

Ecology. The natural history of plants should receive considerable attention, and the behavior of plants toward environmental factors (especially light and moisture), dissemination, cross and close pollination, and the more important structural and physiological characteristics of plant formations (hydrophytes, halophytes, mesophytes, and xerophytes) should be included.

As evidence of proper laboratory training and of satisfactory work, a note-book must be submitted. (See Submission of Note-books, page 51).

¹ The relative value of subjects is expressed in units according to the time required for adequate preparation in them; a unit in the sense here used represents a course of five (5) periods weekly throughout an academic year of the preparatory school.

CHEMISTRY (counting one unit)

The candidate's preparation in chemistry should include:

a. The study of a standard text-book, to the end that the pupil may gain a comprehensive and connected view of the most important facts and laws of elementary chemistry.

b. Instruction by lecture-table demonstrations, to be used mainly as a basis for questioning upon the general principles involved in the pupil's laboratory investigations.

c. Individual laboratory work, comprising at least forty exercises.

An indexed note-book of the experiments must be submitted. (See Submission of Note-books, page 51).

The following outline includes only the indispensable things which must be studied in the class-room and laboratory. The material is, for the most part, common to all elementary text-books and laboratory manuals. The order of presentation will naturally be determined by each teacher for himself.

OUTLINE.—The chief physical and chemical characteristics, the preparation and the recognition of the following elements together with their principal compounds: *oxygen, hydrogen, carbon, nitrogen, chlorine, bromine, iodine, fluorine, sulphur*, phosphorus, silicon, potassium, *sodium*, calcium, magnesium, *zinc*, copper, mercury, silver, aluminum, *lead*, tin, *iron*, manganese, chromium.

More detailed study should be confined to the italicized *elements* (as such) and to a restricted list of compounds such as: water, hydrochloric acid, carbon-monoxide, carbon-dioxide, oxides of nitrogen, nitric acid, ammonia, sulphur-dioxide, sulphuric acid, hydrogen sulphide, sodium-hydroxide, ammonium-hydroxide.

Attention should be given to the atmosphere (constitution and relation to animal and vegetable life), flames, acids, bases, salts, oxidation and reduction, crystallization, combining proportions by weight and volume, calculations founded on these and Boyle's and Charles's laws, symbols and nomenclature, atomic and ionization theory, atomic weights, valency (in a very elementary way), nascent state, natural grouping of the elements, solution (solvents and solubility of gases and solids and liquids, saturation), strength of acids and bases, conservation and dissipation of energy, chemical energy, electrolysis. Chemical terms should be clearly understood, and the pupil should be able to illustrate and apply the ideas they embody. The theoretical topics are not intended to form separate subjects of study, but to be taught only so far as is necessary for the correlation and explanation of the experimental facts.

DRAWING (counting one unit)

The candidate's preparation in drawing should be directed toward training him in accurate observation and in definite and truthful representation of form, without attempt to represent color or color values.

The candidate should be able to draw correctly and with lines of good quality simple forms in correct perspective in the size in which they are felt in the plane of the drawing, or larger or smaller. It is recommended that pupils should be taught to draw from the object itself rather than from the flat.

The elementary principles of perspective are to be thoroughly learned, and the candidate should be able to apply them in freehand drawing from the object or from the imagination.

No definite prescription as to method of teaching is made. The examination will test the preparation of the candidate in the following points:

1. Ability to sketch from the object with reasonable correctness as to proportion, structure, and form. It is recommended that the subjects drawn include simple geometrical objects and simple natural objects such as living plant forms.
2. Ability to sketch freehand from dictation with reasonable accuracy any simple geometrical figure or combination of figures.
3. Ability to represent accurately in perspective a simple geometrical solid of which projection drawings are given, and ability to make consistent projection drawings of a simple geometrical solid of which a perspective representation is given.
4. Ability to answer questions in regard to the principles involved in making these drawings.

Every candidate must present at the time of and as part of the examination in drawing a set of freehand drawings executed during one year's course in a preparatory school and within a period of two years before the time of application for admission.

These drawings should be at least twenty in number and should display proficiency in the points mentioned in paragraphs 1, 2, and 3.

Correctness of proportion and accuracy in the angles and curves and structural relations of the parts of every figure or object drawn are of the highest importance, and great care should be taken in laying out the drawings, in the use of construction lines, and in the drawing of general masses and contour before the details are begun.

A certain proportion of shade drawings from casts may be included, but they are not required and should not form the majority of the drawings submitted.

All drawings should be of uniform size, and fastened together, not rolled.

In case the candidate has not attended a systematic course of instruction as detailed above she may submit a corresponding set of freehand drawings. (See Submission of Note-books, page 51.)

ENGLISH

Elementary (counting three units)

Beginning with the year 1915 the entrance examinations in English will be given upon the plan recommended by the National Conference on

Uniform Entrance Requirements in English, and adopted by the College Entrance Examination Board. Under this plan candidates will be examined separately in (1) Grammar and Composition, and (2) Literature, each examination counting as 1½ units. This change is in fact less one of intention than of emphasis, its object being to free an examination which has long been accepted as an examination primarily in composition from the confusing factor of preparation upon certain prescribed books.¹

Requirements for 1915-1919

The study of English in school has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence, and appreciation.

1. Grammar and Composition

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description, and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from her reading in literature. Finally, special instruction in language and composition should be accompanied by the concerted effort of teachers in all branches to cultivate in the student the habit of using good English in her recitations and various exercises, whether oral or written.

2. Literature

The second object is sought by means of two lists of books, headed respectively *Reading* and *Study*, from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, she is further advised to acquaint herself with the most important facts in the lives of the authors whose works she reads and with their place in literary history.

a. Reading

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature, by giving her a first-hand knowledge of some of its best specimens. She should read the books

¹ Examinations in English *b* (Old Requirements, *Study and Practice*) will be given in June and September, 1915, and in January, 1916, for those who have already passed English *a* (Old Requirements, *Reading and Practice*).

carefully, but her attention should not be so fixed upon details that she fails to appreciate the main purpose and charm of what she reads.

With a view to large freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group I:

Group I (Classics in Translation). The *Old Testament*, comprising at least the chief narrative episodes in *Genesis*, *Exodus*, *Joshua*, *Judges*, *Samuel*, *Kings*, and *Daniel*, together with the books of *Ruth* and *Esther*; the *Odyssey*, with the omission, if desired, of Books I, II, III, IV, V, XV, XVI, XVII; the *Iliad*, with the omission, if desired, of Books XI, XIII, XIV, XV, XVII, XXI; the *Æneid*. The *Odyssey*, *Iliad*, and *Æneid* should be read in English translations of recognized literary excellence.

(For any selection from this group a selection from any other group may be substituted.)

Group II (Shakspeare). *Midsummer Night's Dream*, *Merchant of Venice*, *As You Like It*, *Twelfth Night*, *The Tempest*, *Romeo and Juliet*, *King John*, *Richard II*, *Richard III*, *Henry V*, *Coriolanus*, *Julius Cæsar*, *Macbeth*, *Hamlet*. (No one of the last three may be taken if chosen for study under b.)

Group III (Prose Fiction). Malory, *Morte d'Arthur* (about 100 pages); Bunyan, *Pilgrim's Progress*, Part I; Swift, *Gulliver's Travels* (voyages to Lilliput and to Brobdingnag); Defoe, *Robinson Crusoe*, Part I; Goldsmith, *Vicar of Wakefield*; Frances Burney, *Evelina*; Scott's Novels, any one; Jane Austen's Novels, any one; Maria Edgeworth, *Castle Rackrent*, or *The Absentee*; Dickens's Novels, any one; Thackeray's Novels, any one; George Eliot's Novels, any one; Mrs. Gaskell, *Cranford*; Kingsley, *Westward Ho!* or *Hereward, the Wake*; Reade, *The Cloister and the Hearth*; Blackmore, *Lorna Doone*; Hughes, *Tom Brown's School Days*; Stevenson, *Treasure Island*, or *Kidnapped*, or *Master of Ballantrae*; Cooper's Novels, any one; Poe, *Selected Tales*; Hawthorne, *The House of the Seven Gables*, or *Twice Told Tales*, or *Mosses from an Old Manse*; a collection of *Short Stories* by various standard writers.

Group IV (Essays, Biography, etc.). Addison and Steele, *The Sir Roger de Coverley Papers*, or selections from the *Tatler* and *Spectator* (about 200 pages); Boswell, selections from the *Life of Johnson* (about 200 pages); Franklin, *Autobiography*; Irving, selections from the *Sketch Book* (about 200 pages), or *Life of Goldsmith*; Southey, *Life of Nelson*; Lamb, selections from the *Essays of Elia* (about 100 pages); Lockhart, selections from the *Life of Scott* (about 200 pages); Thackeray, lectures on *Swift*, *Addison*, and *Steele*, in the *English Humorists*; Macaulay, any one of the following essays: *Lord Clive*, *Warren Hastings*, *Milton*, *Addison*, *Goldsmith*, *Frederick the Great*, *Madame d'Arblay*; Trevelyan, selections from the *Life of Macaulay* (about 200 pages); Ruskin, *Sesame and Lilies*, or *Selections* (about 150 pages); Dana, *Two Years Before the Mast*; Lincoln, selections, including at least the two *Inaugurals*, the *Speeches in Independence Hall* and at *Gettys-*

burg, the *Last Public Address*, the *Letter to Horace Greeley*, together with a brief memoir or estimate of Lincoln; Parkman, *The Oregon Trail*; Thoreau, *Walden*; Lowell, *Selected Essays* (about 150 pages); Holmes, *The Autocrat of the Breakfast Table*; Stevenson, *An Inland Voyage* and *Travels with a Donkey*; Huxley, *Autobiography* and selections from *Lay Sermons*, including the addresses on *Improving Natural Knowledge*, *A Liberal Education*, and *A Piece of Chalk*; a collection of *Essays* by Bacon, Lamb, De Quincey, Hazlitt, Emerson, and later writers; a collection of *Letters* by various standard writers.

Group V (Poetry). Palgrave's *Golden Treasury* (First Series), Books II and III, with special attention to Dryden, Collins, Gray, Cowper, and Burns; Palgrave's *Golden Treasury* (First Series), Book IV, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under b); Goldsmith, *The Traveller* and *The Deserted Village*; Pope, *The Rape of the Lock*; a collection of English and Scottish Ballads, as, for example, some Robin Hood ballads, *The Battle of Otterburn*, *King Estmere*, *Young Beichan*, *Bewick and Graham*, *Sir Patrick Spens*, and a selection from later ballads; Coleridge, *The Ancient Mariner*, *Christabel*, and *Kubla Khan*; Byron, *Childe Harold*, Canto III or IV, and *The Prisoner of Chillon*; Scott, *The Lady of the Lake*, or *Marmion*; Macaulay, *The Lays of Ancient Rome*, *The Battle of Naseby*, *The Armada*, *Ivry*; Tennyson, *The Princess*, or *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur*; Browning, *Cavalier Tunes*, *The Lost Leader*, *How They Brought the Good News from Ghent to Aix*, *Home Thoughts from Abroad*, *Home Thoughts from the Sea*, *Incident of the French Camp*, *Hervé Riel*, *Pheidippides*, *My Last Duchess*, *Up at a Villa—Down in the City*, *The Italian in England*, *The Patriot*, "*De Gustibus—*", *The Pied Piper*, *Instans Tyrannus*; Arnold, *Sohrab and Rustum*, and *The Forsaken Merman*; selections from *American Poetry*, with special attention to Poe, Lowell, Longfellow, and Whittier.

b. Study

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. The books provided for study are arranged in four groups, from each of which one selection is to be made.

Group I (Drama). Shakspeare, *Julius Cæsar*, or *Macbeth*, or *Hamlet*.

Group II (Poetry). Milton, *L'Allegro*, *Il Penseroso*, and either *Comus* or *Lycidas*; Tennyson, *The Coming of Arthur*, *The Holy Grail*, and *The Passing of Arthur*; the selections from Wordsworth, Keats, and Shelley in Book IV of Palgrave's *Golden Treasury* (First Series).

Group III (Oratory). Burke, *Speech on Conciliation with America*; Macaulay's *Two Speeches on Copyright* and Lincoln's *Speech at Cooper Union*; Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*.

Group IV (Essays). Carlyle, *Essay on Burns*, with a selection from Burns's *Poems*; Macaulay, *Life of Johnson*; Emerson, *Essay on Manners*.

Examination

However accurate in subject matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

The examination will be divided into two parts.

1. Grammar and Composition

In grammar and composition, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English, which one should know in distinction from current errors. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books read, from the candidate's other studies, and from her personal knowledge and experience quite apart from reading. For this purpose the examiner will provide several subjects, perhaps eight or ten, from which the candidate may make her own selections. She will not be expected to write more than four hundred words per hour.

2. Literature

The examination in literature will include:

a. General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under *a. Reading*, above. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which she was prepared; but this list will not be made the basis of detailed questions.

b. A test on the books prescribed for study, which will consist of questions upon their content, form, and structure, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

Advanced (counting one unit)

Candidates should have had substantially the same training as that prescribed for freshmen under English A1-A2. They will be examined in the principles of effective organization and expression as set forth in any good text-book of rhetoric and as exemplified in the following works prescribed for reading: Two of the essays of William Hazlitt, and two of Lamb's *Essays of Elia*, Carlyle's *Past and Present*, Newman's *Literature*, about one-fourth of Holmes's *Autocrat of the Breakfast Table*, Lincoln's

Debate with Douglas at Alton, Arnold's *Sweetness and Light*, Mill's *Subjection of Women*, Huxley's *A Piece of Chalk*, Lowell's *Democracy*, a good English or American novel written since 1880, a good modern play in English, and two short stories by each of the following authors: Hawthorne, Poe, Stevenson, and Kipling. The examination will test a candidate's grasp of expository, argumentative, descriptive, and narrative methods, and will call for specific comment and comparison on points of style.

At least two weeks before the examinations begin each candidate must have filed with the Secretary of the College the following manuscripts duly certified (see Submission of Note-Books, page 51): two (2) essays of about 1000 words each, or four (4) essays of about 500 words each, on topics related to the prescribed reading; two (2) essays of about 1000 words each on topics not related to the prescribed reading; one (1) consecutive argument of at least 1000 words; one (1) piece of narrative, at least 1000 words, or short descriptions in number sufficient to make up at least the same amount.

FRENCH

a. Elementary (counting two units)

THE AIM OF THE INSTRUCTION.—At the end of the elementary course the pupil should be able to pronounce French accurately, to read at sight easy French prose, to put into French simple English sentences taken from the language of every-day life, or based upon a portion of the French text read, and to answer questions on the rudiments of the grammar, as defined below.

THE WORK TO BE DONE.—During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the inflection of the regular and the more common irregular verbs, the plural of nouns, the inflection of adjectives, participles, and pronouns; the use of personal pronouns, common adverbs, prepositions and conjunctions; the order of words in the sentence, and the elementary rules of syntax; (3) abundant easy exercises, designed not only to fix in the memory the forms and principles of grammar but also to cultivate readiness in the reproduction of natural forms of expression; (4) the reading of from 100 to 175 duodecimo pages of graduated texts, with constant practice in translating into French easy variations of the sentences read (the teacher giving the English), and in reproducing from memory sentences previously read; (5) writing French from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of easy modern prose in the form of stories, plays, or historical or biographical sketches; (2) constant practice, as in the previous year, in translating into French easy variations upon the texts read; (3) frequent abstracts, sometimes oral and sometimes written, of portions of the text already read; (4) writing French from dictation; (5) continued drill upon the rudiments of grammar, with constant application

in the construction of sentences; (6) mastery of the forms and use of pronouns, pronominal adjectives, of all but the rare irregular verb forms, and of the simpler uses of the conditional and subjunctive.

Suitable texts for the second year are: About's *Le roi des montagnes*, Bruno's *Le tour de la France*, Daudet's easier short tales, La Bédolière's *La Mère Michel et son chat*, Erckmann-Chatrian's stories, Foncin's *Le pays de France*, Labiche and Martin's *La Poudre aux yeux* and *Le voyage de M. Perrichon*, Lavis's *Histoire de France*, Legouvé and Labiche's *La cigale chez les fourmis*, Malot's *Sans famille*, Mariet's *La tâche du petit Pierre*, Mérimée's *Colomba*, extracts from Michelet, Sarcey's *Le siège de Paris*, Verne's stories.

b. Intermediate (counting one unit)

THE AIM OF THE INSTRUCTION.—At the end of the intermediate course the pupil should be able to read at sight ordinary French prose or simple poetry, to translate into French a connected passage of English based on the text read, and to answer questions involving a more thorough knowledge of syntax than is expected in the elementary course.

THE WORK TO BE DONE.—This should comprise the reading of from 400 to 600 pages of French of ordinary difficulty, a portion to be in the dramatic form; constant practice in giving French paraphrases, abstracts, or reproductions from memory of selected portions of the matter read; the study of a grammar of moderate completeness; writing from dictation.

Suitable texts are: About's stories, Augier and Sandeau's *Le gendre de M. Poirier*, Béranger's poems, Corneille's *Le Cid* and *Horace*, Coppée's poems, Daudet's *La Belle-Nivernaise*, La Brète's *Mon oncle et mon curé*, Madame de Sévigné's letters, Hugo's *Hernani* and *La chute*, Labiche's plays, Mignet's historical writings, Molière's *L'avare* and *Le bourgeois gentilhomme*, Racine's *Athalie*, *Andromaque*, and *Esther*, George Sand's plays and stories, Sandeau's *Mademoiselle de la Seiglière*, Scribe's plays, Thierry's *Récits des temps mérovingiens*, Thiers's *L'expédition de Bonaparte en Egypte*, Vigny's *La canne de jonc*, Voltaire's historical writings.

c. Advanced (counting one unit for candidates for the two-years' course preparatory to the School of Journalism only)

THE AIM OF THE INSTRUCTION.—At the end of the advanced course the pupil should be able to read at sight, with the help of a vocabulary of special or technical expressions, difficult French not earlier than that of the seventeenth century; to write in French a short essay on some simple subject connected with the works read; to put into French a passage of easy English prose; and to carry on a simple conversation in French.

THE WORK TO BE DONE.—This should comprise the reading of from 600 to 1000 pages of standard French, classical and modern, only difficult

passages being explained in the class; the writing of numerous short themes in French; the study of syntax.

Suitable texts for the fourth year are: Dumas fils, *La question d'argent*; Hugo, *Quatre-vingt treize*, *Les misérables*; Loti, *Pêcheur d'Islande*; Taine, *L'Ancien régime*; Vigny, *Cinq-Mars*; an anthology of verse.

GERMAN

a. Elementary (counting two units)

THE AIM OF THE INSTRUCTION.—At the end of the elementary course in German the pupil should be able to read at sight, and to translate if called upon, by way of proving her ability to read, a passage of very easy dialogue or narrative prose, help being given upon unusual words and constructions, to put into German short English sentences taken from the language of every-day life or based upon the text given for translation, and to answer questions upon the rudiments of grammar, as defined below.

THE WORK TO BE DONE.—During the first year the work should comprise: (1) careful drill upon pronunciation; (2) the memorizing and frequent repetition of easy colloquial sentences; (3) drill upon the rudiments of grammar—that is, upon the inflection of the articles, of such nouns as belong to the language of every-day life, of adjectives, pronouns, weak verbs, and the more usual strong verbs, also upon the use of the more common prepositions, the simpler uses of the modal auxiliaries, and the elementary rules of syntax and word-order; (4) abundant easy exercises designed not only to fix in mind the forms and principles of grammar, but also to cultivate readiness in the reproduction of natural forms of expression; (5) the reading of from 75 to 100 pages of graduated texts from a reader, with constant practice in translating into German easy variations upon sentences selected from the reading lesson (the teacher giving the English), and in the reproduction from memory of sentences previously read.

During the second year the work should comprise: (1) the reading of from 150 to 200 pages of literature in the form of easy stories and plays; (2) accompanying practice, as before, in the translation into German of easy variations upon the matter read, and also in the off-hand reproduction, sometimes orally and sometimes in writing, of the substance of short and easy selected passages; (3) continued drill upon the rudiments of the grammar, directed to the ends of enabling the pupil, first, to use her knowledge with facility in the formation of sentences, and, secondly, to state her knowledge correctly in the technical language of grammar.

Stories suitable for the elementary course can be selected from the following list: Andersen's *Märchen* and *Bilderbuch ohne Bilder*; Arnold's *Fritz auf Ferien*; Baumbach's *Die Nonna* and *Der Schwiegersohn*; Gerstäcker's *Germelshausen*; Heyse's *L'Arrabbiata*, *Das Mädchen von Treppi*, and *Anfang und Ende*; Hillern's *Höher als die Kirche*; Jensen's *Die braune Erica*; Leander's *Träumereien* and *Kleine Geschichten*; Seidel's *Märchen*;

Stökl's *Unter dem Christbaum*; Storm's *Immensee* and *Geschichten aus der Tonne*; Zschokke's *Der zerbrochene Krug*.

Among the shorter plays the best available are perhaps Benedix's *Der Prozess*, *Der Weiberfeind*, and *Günstige Vorzeichen*; Elz's *Er ist nicht eifersüchtig*; Wichert's *An der Majorsecke*; Wilhelmi's *Einer muss heiraten*. It is recommended, however, that not more than one of these plays be read. The narrative style should predominate. A good selection of reading matter for the second year would be Andersen's *Märchen* or *Bilderbuch* or Leander's *Träumereien*, to the extent of, say, forty pages; after that such a story as *Das kalte Herz*, or *Der zerbrochene Krug*, then *Höher als die Kirche*, or *Immensee*; next, a good story by Heyse, Baumbach, or Seidel; lastly *Der Prozess*.

b. Intermediate (counting one unit)

THE AIM OF THE INSTRUCTION.—At the end of the intermediate course the pupil should be able to read at sight German prose of ordinary difficulty, whether recent or classical; to put into German a connected passage of simple English paraphrased from a given text in German; to answer any grammatical questions relating to usual forms and essential principles of the language, including syntax and word-formation; and to translate and explain (so far as explanation may be necessary) a passage of classical literature taken from some text previously studied.

THE WORK TO BE DONE.—The work should comprise, in addition to the elementary course, the reading of about 400 pages of moderately difficult prose and poetry, with constant practice in giving, sometimes orally and sometimes in writing, paraphrases, abstracts, or reproductions from memory of selected portions of the matter read, also grammatical drill upon the less usual strong verbs, the use of articles, cases, auxiliaries of all kinds, tenses and modes (with special reference to the infinitive and subjunctive), and likewise upon word-order and word-formation.

The intermediate course is supposed to be the elementary course plus one year's work at the rate of not less than four recitations a week. Suitable reading matter for the third year can be selected from such works as the following: Ebner-Eschenbach's *Die Freiherren von Gemperlein*; Freytag's *Die Journalisten* and *Bilder aus der deutschen Vergangenheit*—for example, *Karl der Grosse*, *Aus den Kreuzzügen*, *Doktor Luther*, *Aus dem Staat Friedrichs des Grossen*; Fouqué's *Undine*; Gerstäcker's *Irrefahrten*; Goethe's *Hermann und Dorothea* and *Iphigenie*; Heine's poems and *Reisebilder*; Hoffmann's *Historische Erzählungen*; Lessing's *Minna von Barnhelm*; Meyer's *Gustav Adolfs Page*; Moser's *Der Bibliothekar*; Riehl's *Novellen*—for example, *Burg Neideck*, *Der Fluch der Schönheit*, *Der stumme Ratsherr*, *Das Spielmannskind*; Rosegger's *Waldheimat*; Schiller's *Der Neffe als Onkel*, *Der Geisterseher*, *Wilhelm Tell*, *Die Jungfrau von Orleans*, *Das Lied von der Glocke*, *Balladen*; Scheffel's *Der Trompeter von Säckingen*; Uhland's poems; Wildenbruch's *Das edle Blut*.

- c. Advanced** (counting one unit for candidates for the two-years' course preparatory to the School of Journalism only)

THE AIM OF THE INSTRUCTION.—At the end of the advanced course the student should be able to read, after brief inspection, any German literature of the last one hundred and fifty years that is free from any unusual textual difficulties, to put into German a passage of simple English prose, to answer in German questions relating to the lives and works of great writers studied, and to write in German a short independent theme upon some assigned topic.

THE WORK TO BE DONE.—The work of the advanced course should comprise the reading of about five hundred pages of good literature in prose and poetry, reference readings upon the lives and works of the great writers studied, the writing in German of numerous short themes upon assigned subjects, independent translation of English into German.

Suitable texts for the fourth year are: Goethe's, Schiller's, Lessing's works and lives.

GREEK

Elementary (counting two or three units)

NOTE.—To secure credit for two units in Greek, candidates must offer *a* *b* and *c*. To secure credit for three units they must offer *a*, *b*, *c*, *f*, and *g*.

a. i. Grammar. The common forms, idioms, and constructions, and the general grammatical principles of Attic Greek prose.

ii. Elementary prose composition. Translation into Greek of detached sentences to test the candidate's knowledge of grammatical constructions.

The examination in the two subjects immediately preceding will be based on the first two books of Xenophon's *Anabasis*.

Both parts of Greek a must be passed at one and the same examination.

b. Xenophon. The first four books of the *Anabasis*.

c. Homer. The first three books of the *Iliad* (omitting II, 494–end) and the constructions, poetical forms, and prosody of Homer's *Iliad*.

f. Prose composition. Translation into Greek of continuous prose based on Xenophon and other Attic prose of similar difficulty.

g. Sight translation of prose. Translation into English at sight based on prose of no greater difficulty than Xenophon's *Anabasis*.

Advanced (counting one unit)

Candidates offering Advanced Greek will be required to have covered substantially the same ground as that included under Greek 5, 6. In Homer, for which no equivalent will be accepted, the minimum requirement will be 1200 lines in addition to the amount offered for the elementary examination. The candidate must also offer Plato's *Apology*, and Lucian, 50 pages in the Teubner text, and in prose composition at least fifteen

exercises in Spieker's Greek Prose Composition. If candidates wish to offer equivalents for the portions of Plato or Lucian named above, they must designate them when they apply for examination in this subject.

HISTORY

Elementary

NOTE.—Each of the four divisions, *a*, *b*, *c*, and *d*, counts one unit. Candidates for admission to the A.B., the B.S., or the general two-years' course may offer any one or any two of the divisions without restriction. Candidates for admission to the two-years' course preparatory to the School of Journalism must offer two units and may offer three or four units.

a. **Ancient history**, including a brief introductory study of the Oriental peoples, and early mediæval history to the death of Charlemagne, with due reference to art, literature, and government.

b. **Mediæval and modern history**, from the death of Charlemagne to the present time, with due reference to the growth of the state-system.

c. **English history**, with due reference to social and political development.

d. **American history**, with the elements of civil government.

On examination a candidate must show such general knowledge of the subject in each division offered as may be acquired from the study of an accurate text-book of not less than three hundred pages. *Since the questions will be so framed as to require comparison and the use of judgment rather than mere exercise of memory on the part of the pupil*, it is recommended that the teacher prescribe a course of supplementary reading of not less than three hundred pages, dealing with the more important periods and events in each division offered. Geographical knowledge will be tested by requiring the location of places, boundaries, and movements on an outline map.

Advanced (counting one unit)

Candidates offering Advanced History will be required to have performed work of the same kind, amount, and quality as that required for History A1-A2—the course prescribed in Barnard College. The work done at school, therefore, should be substantially identical with that course, the nature of which is explained in a syllabus that may be obtained at the University Bookstore. Those candidates who desire to offer history as an advanced subject must have offered for elementary history either *a* and *b* or *c* and *d* and must present themselves for examination upon the two divisions *which they did not offer as an elementary subject*. The examination will presuppose superior ability on the part of the candidate to understand the significance of historical events, movements, or tendencies, to discern similarities and contrasts, and to combine results. Especial care

should be exercised, therefore, in the selection of the supplementary reading on the more important periods and events in each of the two divisions.

As further evidence of proficiency, satisfactory written work must be presented in the form of a note-book, or bound collection of notes (see Submission of Note-books, page 51), which must contain not less than five thousand words on each division offered, and must show practice in at least three of the following exercises:

- (a) Notes and digests of reading outside of the text-books.
- (b) Written recitations requiring the use of judgment, and the application to new questions of knowledge already gained.
- (c) Written parallels between historical characters, events, or periods.
- (d) Brief studies of topics limited in scope, prepared outside the classroom and illustrated by some reference to contemporary material.
- (e) Historical maps or charts showing explorations, migrations, conquests, territorial changes, or social phenomena.

ITALIAN

Elementary (counting two units)

THE AIM OF THE INSTRUCTION.—At the end of the course the pupil should be able to pronounce Italian accurately, to read at sight easy Italian prose, to put into Italian simple English sentences taken from the language of every-day life, or based upon a portion of the Italian text read, and to answer correctly questions on the rudiments of the grammar, as defined below.

THE WORK TO BE DONE.—During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives, and pronouns, and the elementary rules of syntax; (3) abundant exercises illustrating the principles of grammar; (4) the reading and accurate rendering into good English of from 100 to 175 duodecimo pages of graduated texts, with translation into Italian of easy variations of the sentences read; (5) writing Italian from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of modern prose from different authors and of easy poetry; (2) practice in translating Italian into English, and English variations of the text into Italian; (3) continued study of the elements of grammar and of syntax; (4) mastery of all but the rare irregular verb-forms and of the simpler uses of the moods and tenses; (5) writing Italian from dictation.

Suitable texts for the second year are: E. DeAmicis' *Cuore*; G. Giacosa's *Acquazzoni in montagna*; P. Zambri's *Il caporale di settimana*; G. Gozzi's *Poesie e prosce*, scelte da A. Pippi; G. C. Abba's *Da Quarto al Volturno*; Guido Zatorsi's *Guardare e pensare*; S. Zarira's *Il Signor Io*; A. Stoppani's *Il bel paese*.

LATIN

Elementary

NOTE.—Candidates for admission to the A.B. course (except those who offer three units of Greek) must offer 4, 5, and 6, to secure the four prescribed units. Candidates for admission to the B. S. course or the two-years' course, and candidates for admission to the A.B. course who offer three units of Greek, may offer two, three, or four units from this subject. Such candidates must offer 3 to secure two units; and, to secure three units, 3 with either 4 or 5.

Either Latin 4 or Latin 5 may be offered as one of the "intermediate" or "advanced" subjects required for admission to the B.S. course.

3. **Second year Latin** will presuppose reading not less in amount than Cæsar, Gallic War, I–IV, selected by the schools from Cæsar (Gallic War and Civil War) and Nepos (Lives); but the passages set will be chosen with a view to sight translation. The paper will include easy grammatical questions and some simple composition. (See note above.)

4. **Cicero and sight translation of prose.**

i. Prescribed reading: the oration for the Manilian Law and the oration for Archias.

ii. Sight translation of prose of no greater difficulty than ordinary passages of Cicero's orations.

Candidates must deal satisfactorily with both these parts of the paper, or they will not receive credit for either part.

5. **Vergil and sight translation of poetry.**

i. Prescribed reading: Vergil's *Æneid*, I, II, and either IV or VI at the option of the candidate, with questions on the subject-matter, literary and historical allusions, and prosody.

ii. Sight translation of poetry of no greater difficulty than Vergil's *Æneid*.

Candidates must deal satisfactorily with both these parts of the paper, or they will not receive credit for either part.

6. **Advanced prose composition.** The examination will demand thorough knowledge of all regular inflections, all common irregular forms, and the ordinary syntax and vocabulary of the prose authors read in school, with ability to use this knowledge in writing simple Latin prose. The words, constructions, and range of ideas called for will be such as are common in the reading of the preparatory course of four years.

The foregoing requirements are in substance identical with those recommended for adoption by the American Philological Association at its annual meeting in December, 1909, viz.:

I. **Amount and Range of the Reading Required**

1. The Latin reading required of candidates for admission to college, without regard to the prescription of particular authors and works, shall be not less *in amount* than Cæsar, Gallic War, I–IV; Cicero, the orations

against Catiline, for the Manilian Law, and for Archias; Vergil, *Æneid*, I-VI.

2. The amount of reading specified above shall be selected by the schools from the following authors and works: Cæsar (Gallic War and Civil War) and Nepos (Lives); Cicero (orations, letters, and *De Senectute*) and Sallust (Catiline and Jugurthine War); Vergil (Bucolics, Georgics, and *Æneid*) and Ovid (Metamorphoses, *Fasti*, and *Tristia*).

II. Subjects and Scope of the Examinations

1. *Translation at Sight*.—Candidates will be examined in translation at sight of both prose and verse. The vocabulary, constructions, and range of ideas of the passages set will be suited to the preparation secured by the reading indicated above.

2. *Prescribed Reading*.—Candidates will be examined also upon the following prescribed reading: Cicero, orations for the Manilian Law and for Archias, and Vergil, *Æneid*, I, II, and either IV or VI at the option of the candidate, with questions on subject-matter, literary and historical allusions, and prosody. Every paper in which passages from the prescribed reading are set for translation will contain also one or more passages for translation at sight; and candidates must deal satisfactorily with both these parts of the paper, or they will not be given credit for either part.

3. *Grammar and Composition*.—The examinations in grammar and composition will demand thorough knowledge of all regular inflections, all common irregular forms, and the ordinary syntax and vocabulary of the prose authors read in school, with ability to use this knowledge in writing simple Latin prose. The words, constructions, and range of ideas called for in the examinations in composition will be such as are common in the reading of the year, or years, covered by the particular examination.

Advanced (counting one unit)

Candidates offering Advanced Latin will be required to have covered substantially the same ground as that included under Latin A1, A2, the course prescribed for freshmen. In Horace and Catullus, for which no equivalent will be accepted, the minimum requirement will be the first and third books of the Odes, and selections from the shorter poems of Catullus amounting to four hundred lines, together with a satisfactory knowledge of the prosody. The candidate must also offer Livy, Book XXI (chapters 1-45 inclusive), and Book XXII (chapters 2-7 and 43-56 inclusive), Terence's *Phormio* (entire), and Gildersleeve and Lodge's *Prose Composition*, exercises 1, 5, 9, 13, 17, 21, 25, 29, 33, 37, 41, 45, 49, 53, 57. If candidates wish to offer equivalents for the portions of Livy or Terence named above, they must designate them when they apply for examination in this subject.

[MATHEMATICS

Elementary

NOTE.—Candidates for admission to the A.B., the B.S., or the general two-years' course must offer *a*, *i* and *ii*, and *c* to secure the two and one-half prescribed units. Candidates for admission to the two-years' course preparatory to the School of Journalism may offer one or more units from the following: Mathematics *a*, *i*, one unit, *a*, *ii*, one-half unit; *c*, one unit.

a. Elementary algebra.

i. The four fundamental operations for rational algebraic expressions; factoring, determination of highest common factor and lowest common multiple by factoring; fractions, including complex fractions, ratio and proportion; linear equations, both numerical and literal, containing one or more unknown quantities; problems depending on linear equations; radicals, including the extraction of the square root of polynomials and of numbers; exponents, including the fractional and negative.

ii. Quadratic equations, both numerical and literal; simple cases of equations with one or more unknown quantities that can be solved by the methods of linear or quadratic equations; problems depending upon quadratic equations; the binomial theorem for positive integral exponents; the formulas for the *n*th term and the sum of the terms of arithmetic and geometric progressions, with applications.

It is assumed that pupils will be required throughout the course to solve numerous problems which involve putting questions into equations. Some of these problems should be chosen from mensuration, from physics, and from commercial life. The use of graphical methods and illustrations, particularly in connection with the solution of equations, is also expected.

c. Plane geometry.

The usual theorems and constructions of good text-books, including the general properties of plane rectilinear figures; the circle and the measurement of angles; similar polygons; areas; regular polygons, and the measurement of the circle; the solution of numerous original exercises, including loci problems; applications to the mensuration of lines and plane surfaces.

Advanced (counting one-half, one, or one and one-half units)

NOTE.—A candidate may offer one or more of the following subjects, each of which is equivalent to one-half unit.

For admission to the college course in Analytic Geometry in the freshman year, the student must have offered Plane Trigonometry at entrance and must take in the freshman year those parts of Mathematics A the equivalents of which were not offered at entrance.

b. Advanced algebra.

Permutations and combinations, limited to simple cases; complex numbers, with graphical representation of sums and differences; determinants, chiefly of the second, third, and fourth orders, including the use of minors and the solution of linear equations; numerical equations of higher degree, and so much of the theory of equations, with graphical methods, as is necessary for their treatment, including Descartes's rule of signs and Horner's method, but not Sturm's functions or multiple roots.

d. Solid geometry.

The usual theorems and constructions of good text-books; including the relations of planes and lines in space; the properties and measurements of prisms, pyramids, cylinders, and cones; the sphere and the spherical triangle; the solution of numerous original exercises, including loci problems; applications to the mensuration of surfaces and solids.

f. Plane trigonometry.

Definitions of relations of the six trigonometric functions as ratios, circular measurement of angles; proofs of principal formulas, in particular for the sine, cosine, and tangent of the sum and the difference of two angles, of the double angle and the half angle, the product of expressions for the sum or the difference of two sines or of two cosines, etc.; the transformation of trigonometric expressions by means of these formulas; solution of trigonometric equations of a simple character; theory and use of logarithms (without the introduction of work involving infinite series); the solution of right and oblique plane triangles, and practical applications.

MUSIC (counting one unit)

The candidate may offer either *a* or *b*.

a. Musical Appreciation (counting one unit)

The candidate is expected to have:

1. A general knowledge of the principal musical forms—song, classic dance, fugue, sonata (all movements), symphony—and of their historical development.

2. A general knowledge of the lives and environment of at least ten composers including Bach, Mozart, Beethoven, Schubert, Chopin, and five of the following: Handel, Gluck, Haydn, Weber, Mendelssohn, Schumann, Wagner, Verdi, Brahms, Tschaikowsky, Grieg, MacDowell.

3. ¹ Familiarity with certain designated works:

<i>Bach:</i>	Prelude II and Fugue II, Book I, Well-Tempered Clavichord. Gavotte from Sixth English Suite.
<i>Handel:</i>	The Hallelujah Chorus.
<i>Haydn:</i>	Slow Movement from "Emperor" Quartet (op. 76, No. 3).
<i>Mozart:</i>	Symphony in G Minor (entire).
<i>Beethoven:</i>	Sonata (op. 31, No. 3, entire). Slow Movement from Second Symphony. First Movement from Seventh Symphony.
<i>Schubert:</i>	First Movement from Unfinished Symphony. Song, "The Erl-King". Song, "Hark, Hark, the Lark".

¹ The examination in 3 will be held only in September and in January, and will be open only to candidates who have passed the examination in 1 and 2.

<i>Mendelssohn:</i>	Overture to "Midsummer Night's Dream".
<i>Chopin:</i>	Ballade (op. 47). Polonaise (op. 26, No. 1). Nocturne (op. 37, No. 2).
<i>Schumann:</i>	Allegro from Faschingsschwank (op. 26, No. 1). Song, "Im wunderschönen Monat Mai".
<i>Wagner:</i>	Overture to "Tannhäuser". Prize Song from "Die Meistersinger".

In the examination in 3 the candidate will be expected to identify characteristic portions of the works set, when played by the examiner, and to give intelligent information concerning the form and character of the works themselves. The test will not require ability to perform or to read from printed music.

b. Harmony (counting one unit)

The candidate should have acquired:

1. The ability to harmonize, in four vocal parts, simple melodies of not fewer than eight measures, in soprano or in bass—these melodies will require a knowledge of triads and inversions, of diatonic seventh chords and inversions, in the major and minor modes; and of modulation, transient or complete, to nearly-related keys.

2. Analytical knowledge of ninth chords, all non-harmonic tones, and altered chords (including augmented chords). [Students are encouraged to apply this knowledge in their harmonization.]

It is urgently recommended that systematic ear-training (as to interval, melody, and chord) be a part of the preparation for this examination. Simple exercises in harmonization at the pianoforte are recommended. The students will be expected to have a full knowledge of the rudiments of music, scales, intervals, and staff-notation, including the terms and expression-marks in common use.

PHYSICS (counting one unit)

The candidate should be familiar with the elementary principles of physics and some of their practical applications and should be able to solve simple numerical problems. The preparation of the candidate should include:

a. The study of one of the standard text-books in use in secondary schools.

b. Instruction by lecture-table demonstrations in which the phenomena of physics are shown and the principles qualitatively illustrated.

c. Individual laboratory work, comprising at least thirty exercises. A suitable selection of experiments may be made from the list published by the College Entrance Examination Board. An indexed note-book of the experiments must be submitted. (See Submission of Note-books, page 51.)

PHYSIOGRAPHY (counting one unit)

NOTE.—This is identical with the subject called Geography by the College Entrance Examination Board.

The candidate's preparation in physiography should include the study of one of the modern text-books by Davis, Tarr, Dryer, or Gilbert and Brigham, together with an approved laboratory and field course of at least forty exercises actually performed by the candidate. Each division of the subject should receive approximately the same proportion of attention in the laboratory as in the class-work. It is suggested that the exercises be divided somewhat as follows: Earth as a Globe, 5; Ocean, 5; Atmosphere, 12; Land, 18. An indexed note-book containing the record of these exercises must be submitted. (See Submission of Note-books, page 51.)

SPANISH**Elementary (counting two units)**

THE AIM OF THE INSTRUCTION.—At the end of the course, the pupil should be able to pronounce Spanish accurately, to read at sight easy Spanish prose, to put into Spanish simple English sentences taken from the language of every-day life, or based upon a portion of the Spanish text read, and to answer questions on the rudiments of the grammar, as defined below.

THE WORK TO BE DONE.—During the first year the work should comprise: (1) careful drill in pronunciation; (2) the rudiments of grammar, including the conjugation of the regular and the more common irregular verbs, the inflection of nouns, adjectives, and pronouns, and the elementary rules of syntax; (3) exercises containing illustrations of the principles of grammar; (4) the reading and accurate rendering into good English of from 100 to 175 duodecimo pages of graduated texts, with translation into Spanish of easy variations of the sentences read; (5) writing Spanish from dictation.

During the second year the work should comprise: (1) the reading of from 250 to 400 pages of modern prose from different authors; (2) practice in translating Spanish into English, and English variations of the text into Spanish; (3) continued study of the elements of grammar and syntax; (4) mastery of all but the rare irregular verb-forms and of the simpler uses of the moods and tenses; (5) writing Spanish from dictation.

Suitable texts for the second year are: Valera's *El pájaro verde*; Alarcón's *El final de Norma*, *El capitán Veneno*; Valdès's *José*; Galdós's *Doña Perfecta*; *Marianela*; Padre Isla's version of *Gil Blas*; Carrion and Aza's *Zaragüeta*.

ZOOLOGY (counting one unit)

The following outline includes the principles of zoölogy which are indispensable to a general survey of the science. It is planned for a full year's course. It is not intended to indicate order of study of the topics—this must be left to the teacher and the text-book.

1. The general natural history—including general external structure

in relation to adaptations, life histories, geographical range, relations to other plants and animals, and economic relations—of common vertebrates and invertebrates so far as representatives of these groups are obtainable in the locality where the course is given. The types suggested are a mammal, bird, lizard, snake, turtle, newt, frog, dogfish or shark, bony fish, clam, snail, starfish, earthworm, planarian, hydra, sea-anemone, paramoecium. In the case of arthropods, pupils should become familiar with common crustaceans, spiders, myriapods, and insects representing at least five orders. Actual examination of common animals with reference to the above points should be supplemented by reading giving natural-history information.

It is not expected that there will be time for making extensive note-books on the natural-history work; rather will the work in this line take the form of laboratory demonstrations. So far as time permits, drawings and notes should be made. The note-book mentioned below should contain at least drawings on the external structure of four animals not studied under Section 3, preferably two insects, a mollusk, and a second vertebrate.

2. The classifications of animals into phyla and leading classes (except the modern subdivisions of the worms) and the great characteristics of these groups—in the case of insects and vertebrates the characteristics of the prominent orders. The teaching of classification should be by practical work so as to train the pupil to recognize animals and to point out the chief taxonomic characteristics. The meaning of species, genera, and larger groups should be developed by constructive practical work with representatives of insect or vertebrate orders.

3. The general plan of external and internal structure, not the anatomical minutiae, of one vertebrate (preferably frog or fish) in general comparison with the human body; an arthropod (preferably a decapod); an annelid (earthworm or *Nereis*); a coelenterate (hydroid, hydra, or sea-anemone); a protozoön (a ciliate, and amoeba when possible). In place of any of the above types not locally available there may be substituted a second vertebrate, an insect, a mollusk, or an echinoderm. Tissues, the study of which is recommended as optional,¹ should be examined first with the unaided eye, in such a structure as a frog's leg, and then with a microscope to demonstrate the relations of cells and intercellular substance in epithelium and cartilage and, if possible, in other tissues. The functions of the chief tissues and their positions in the body of a vertebrate should be pointed out.

4. (a) The general physiology of the above types, involving the essentials of digestion, absorption, circulation (respiration), cell-metabolism, secretion, excretion, and nervous functions. This should apply comparatively the essentials of elementary work in human physiology. Demonstrations and experiments, such as are suggested in high-school text-books on human physiology, should be introduced, or recalled if not previously

¹ Topics marked "optional" are regarded as desirable for the best high-school zoölogy but will not be required in examinations.

well presented in elementary physiology, in connection with discussion of the chief functions. As far as practicable structure and function should be studied together.

(b) Comparison of the general life-processes in animals and plants (in connection with botany if zoölogy is first studied).

5. The very general features of asexual reproduction of a protozoön (preferably *Paramæcium*); alteration of generations in hydroids; reproduction and regenerations of *Hydra*; the very general external features of embryological development in a fish or frog; and (*optional*) the general cellular nature (not centrosomes and the like) of germ-cells, fertilization, and cell-division in developing eggs should, as far as possible, be demonstrated and briefly described. Also, the most interesting features of development should be pointed out in the case of other animals studied.

6. The prominent evidence of relationship, suggesting evolution, within such groups as the decapods, the insects, and the vertebrates should be demonstrated. A few facts indicating the struggle for existence, adaptation to environment, variations of individuals, and man's selective influence should be pointed out; but the factors of evolution and the discussion of its theories should not be attempted.

7. (*Optional*.¹) Some leading facts regarding the epoch-making discoveries of biological history and the careers of such eminent naturalists as Darwin, Huxley, Pasteur, and Agassiz should be presented.

The above outline of a course in general zoölogy should be developed on the basis of a course of laboratory study guided by definite directions. This should be supplemented by the careful reading of at least one modern elementary text-book in general zoölogy. At least two-thirds of the time should be devoted to the practical studies of the laboratory. If good nature-studies have not preceded the course in high-school zoölogy, pupils should be encouraged to do supplementary work in the line of natural history. A note-book with carefully labeled outline drawings of the chief structures studied anatomically (Section 3), and the drawing mentioned under natural history (Section 1), and with notes on demonstrations and in explanation of drawings, with dates and an index, must be submitted. It will be graded as one-third of the examination. (See Submission of Note-books, below.)

SUBMISSION OF NOTE-BOOKS, DRAWINGS, ETC.

All work submitted must be duly certified to in ink by the teacher in the following form:

Teacher's Certificate

.....School
.....19....

I certify that..... has personally performed,

¹ Topics marked "optional" are regarded as desirable for the best high-school zoölogy but will not be required in examinations.

as recorded by her in this note-book,.....experiments in the.....
laboratory of the..... School, during the year
.....

The laboratory course has occupied time equal to.....hours of
60 minutes each.

Signed.....

Teacher of.....

The teacher may here record the final grade on this laboratory work
of.....per cent.

Drawings should bear a similar certification, or, in case of work not
done under instruction, should be accompanied by the candidate's own
signed declaration.

All note-books, unless otherwise specified, should be submitted at the
time of examination.

The College Entrance Examination Board no longer requires the sub-
mission of drawings or laboratory note-books. Candidates for admission
to Barnard who are taking the examinations of the College Entrance
Examination Board should therefore send the note-books, properly certi-
fied, to the Secretary of Barnard College. The books should be submitted
during the week of the examinations of the College Entrance Examination
Board.

Candidates submitting laboratory note-books or drawings with the
credentials of the State Education Department should send them to the
Secretary of Barnard College *at least ten days* prior to the opening of
the term in September and in February—*i. e.*, by September 20, 1915, or
January 31, 1916.

Advanced English essays or Advanced History note-books should be
sent to the Secretary of the College *at least two weeks before* the exami-
nations begin. Within ten days the candidate will be informed whether
or not the work submitted has been accepted. English essays will *not* be
returned to the writers.

All note-books uncalled for one year from the date of submission will
be destroyed.

REGISTRATION AND ENROLMENT

All properly qualified students, with the exception of those classed as
non-matriculated special students (see p. 29), may matriculate at Barnard

Matricu- lation

College either as candidates for a degree or as special students
who are permitted to attend such courses as they are quali-
fied to take but who are not enrolled as candidates for a

degree.

Before attending any academic exercise every student must comply
with the regulations in regard to registration and payment of fees. She

must present herself in person to furnish the information necessary for the College records. **Registration**

Every new student must also at the time of registration file a statement of the courses which the Provost, on the recommendation of the Committee on Instruction, has authorized her to pursue.

Students already in College are required to give notice of their choice of elective courses for the ensuing year to the Registrar on or before Friday, April 23, 1915. Proper blanks for this purpose will be provided by the Registrar's office. Students should not confuse the filing of elective blanks with registration. **Enrolment for Courses**

The office of the Registrar will be open for registration from Wednesday, September 22, to Tuesday, September 28, 1915, and on Monday and Tuesday, February 7 and 8, 1916. New students may register also on the day following each of these periods.

Students registering later must pay an additional fee of \$5. They may, however, if unable through no fault of their own to complete their registration, file a provisional statement within the statutory period. Students will be held directly accountable for absences incurred owing to late registration.

Every student who holds a scholarship must present her scholarship certificate to the Bursar at the time of registration.

The Dean, on the recommendation of the Committee on Instruction, may for reasons of weight grant a leave of absence to a student in good standing. **Leave of Absence**

An honorable discharge is granted to any adult student in good standing, who may desire to withdraw from the College; a minor must submit the written assent of her parents or guardians. **Honorable Dismissal**

GENERAL STATEMENT REGARDING FEES AND THE REGULATIONS GOVERNING THEIR PAYMENT

All fees are payable in advance at the Bursar's Office. Every student who fails to register within the limits of time fixed by the regulations of the University shall be permitted to register only with the consent of the Dean, and by the payment of an additional fee of \$5. Students who enter late are required to pay the full charge for tuition for the half-year in which they register.

For an examination or any single series of examinations taken at any other time than at the conclusion of a course actually attended a fee of \$5 is charged.

The registration or matriculation fee must be paid at the time of entrance. No official record of a student's attendance can be noted until this fee has been paid.

The Dean may withdraw the privileges of any student who is delinquent in the payment of fees.

Checks should be made payable to the order of Barnard College, and addressed to the office of the Bursar.

Students are requested in cases of withdrawal from the College during the academic year to notify the Registrar in writing without delay. No application for a return of fees can be considered unless
Withdrawal such notice is given at the time of withdrawal.

FEES

For matriculation or registration	\$5.00
Required of all students before entrance. This fee is payable but once and is never refunded.	
For late registration (see p. 53)	5.00
For tuition , payable at the beginning of each half-year	100.00
<i>Students who entered Barnard College before September, 1915, will be charged \$75.00 each half-year.</i>	
Students not candidates for a degree are charged at the rate of \$10.00 a half-year for each point of instruction, with a maximum fee of \$200.00 for the year. If the entire fee is less than \$100.00 the whole must be paid upon registration.	
For examination , payable in each case before the examination is held:	
For entrance (see p. 21)	5.00
For any examination or single series of examinations taken at any other time than at the conclusion of a course actually attended, whether taken prior or subsequent to admission.	5.00
For the degree	15.00
For laboratory work	
Botany (Courses 51, 52, 53, 54, 55, 56), each course	1.25
Botany (Courses 153, 154, 156, 158, 159, 160, 161, 162), each course	2.50
Chemistry (Courses 5, 6), each course	2.00
Chemistry (Courses 43, 44), each course	7.50
Chemistry (Courses 63, 64), each course	6.00
Chemistry (Courses 105, 106, 145, 146), each course	10.00
Mineralogy (Courses 17, 18), each course	1.50
Zoölogy (Courses 1, 2, 3, 4), each course	2.50
Should Course 3 be taken in connection with Course 1, or Course 4 be taken in connection with Course 2 or Course 102, the one fee covers both courses.	
Zoölogy (Courses 53, 54, 101, 102, 151, 152), each course	2.50
For the use of the gymnasium	7.00
Required of every student.	

FEES OF STATE SCHOLARS

Holders of State Scholarships should file their University Scholarship Certificates at the office of the Bursar *on the day of registration* and should be prepared to pay, at the same time, the following fees:

Matriculation fee	. . . . .	\$5.00
Tuition fee	. . . . .	50.00
Gymnasium fee	. . . . .	7.00
		<hr/>
		\$62.00

and Laboratory fee according to work taken.

February payment, tuition fee	\$50.00
-------------------------------	-----------	---------

The certificates will be held in the Bursar's Office until the state funds have been received; they will then be returned to the candidates. A bulletin-board notice will give information as to when they can be claimed.

DORMITORY FEES

Deposit	. . . . .	\$15.00
Payable in advance to secure assignment of room, and held until final closing of accounts for the year as security for damage to rooms, fittings, or furniture, or for any other indebtedness.		

Electricity, charged for by meter.

Board	. . . . .	225.00
Payable in two equal instalments in advance, on or before taking possession of room, and on February 1.		

Rent

Payable in two equal instalments in advance, on or before taking possession of room, and on February 1.

Single rooms.	. . . . .	140-270.00
<i>For new students paying the \$200.00 tuition fee some rooms are available at prices lower than those listed.</i>		
Two-room suites (for one person)	. . . . .	350-385.00
Three-room suites (for two persons)	. . . . .	440-470.00
Private bath (for one, two, or three persons)	. . . . .	50.00

ESTIMATED NECESSARY EXPENSES

- Board and single room, \$365 to \$495 for the academic year.
For new students paying the \$200 tuition fee some rooms are available at prices lower than those listed.
- Electricity, \$5.
Matriculation fee, \$5.
Annual tuition fee, \$200.
Gymnasium fee, \$7.
Text-books, from \$10 to \$20 each year.
Final examination for the degree, \$15.

THE PROGRAM OF STUDIES

Upon satisfactory completion of a curriculum arranged on one of the plans to be described below (pp. 58-60) the student is recommended by

the Faculty of Barnard College to the Trustees of Columbia University for the degree of Bachelor of Arts or Bachelor of Science.

The principles of the program of studies are as follows:

1. The requirement for graduation is 124 points. The term point usually signifies the satisfactory completion of work requiring attendance at class one hour or in a laboratory two hours a week for one half-year.

2. Studies are either prescribed, *i.e.*, obligatory upon all candidates for a degree, or elective, *i.e.*, to be taken, with certain restrictions, at the pleasure of the student.

3. Prescribed studies, with the exception of Economics A, must be taken as far as practicable during the first two years of residence; and subjects taken in college which are continuations of subjects offered at entrance must be taken as far as possible in the first year.

4. No courses other than those specified in the Announcement may be taken except by students specially qualified to pursue them with advantage and with the consent of the Provost, on the recommendation of the Committee on Instruction.

5. No combination of courses amounting to less than 12 or more than 16 points may be made in any half-year without the consent of the Provost on the recommendation of the Committee on Instruction.

6. No credit will be given for a one-hour course, unless it is taken in connection with and as a supplement to a cognate course.

7. No more than four hours of class work, or its equivalent in laboratory work, or seven hours of class work and laboratory work combined, may be taken on the same day.

8. In the A. B. course, a major subject of at least 18 points of not less than grade C, exclusive of prescribed work, must be taken under some one department before graduation. Students entering by transfer from other colleges are required to take at least 4 points of this major at Barnard. In the B.S. course a major subject of at least 28 points of not less than grade C is prescribed.

9. Admission to courses depends upon completion of the prerequisites as stated to each course separately. In all cases the requirements as to prerequisites for any course must be completed before the beginning of the half-year in which the course is given. Where no prerequisite is stated and where no limitation is noted the course may be taken and counted for a degree by any student of the college.

10. To be recommended for a degree, a student must have made at least 84 points in actual college residence, and at least 24 of these while registered in Barnard College, of which 24 points at least half should be taken during the senior year. The Faculty has power to suspend this rule in individual cases; but a statute of the University forbids the granting of a degree to any person who has not been a member of the University for a full academic year, *i.e.*, two half-years. (See also the second paragraph on page 28.)

11. All requirements for a degree must be fulfilled by the candidate

within six years from the time of her first matriculation as a freshman in college, whether at Barnard or elsewhere; within four and a half years from similar matriculation as a sophomore; within three years from matriculation as a junior; and within one and a half years from similar matriculation as a senior. If the candidate fails to satisfy the requirements within the time here specified, she is to lose credit for all the points gained by her toward the degree, unless, in individual cases, the Faculty shall otherwise direct.

12. No change of program, either by adding or by dropping a course, may be made by a student without the written consent of the Provost, on recommendation of the Committee on Instruction. Except on the initiative of the departments or of the Committee on Instruction, such change will be allowed only in the third week after the opening of the first half-year and in the two weeks preceding the opening of the second half-year. Applications by students for change of program for the first half-year must be filed during the second week of that half-year; applications for change of program for the second half-year must be filed before that half-year begins. Until action is taken upon the application, the student must attend the courses originally named in her program.

13. The election of specific courses in Extension Teaching or in a Summer Session at Columbia University or elsewhere must be approved by the Committee on Instruction of Barnard College. No student who has received a grade of D or F during the preceding academic year will be allowed to count more than 6 points of work taken in a summer session, unless the Committee on Instruction shall otherwise decide. In no case may more than three courses or 8 points of work be counted in a summer session in any one year. No summer session course that is passed with a grade below C will be credited toward a Barnard degree.

14. Courses in Extension Teaching approved by the Committee on Instruction may be credited toward the degrees of A.B. and B.S. for matriculated students registered in Extension Teaching who maintain a grade at least of C.

Students of Barnard will be allowed to attend extension courses which are approved by the Committee on Instruction, and to count them toward the degrees of A.B. and B.S. under the following regulations:

- a. The election of extension courses must be approved by the Committee on Instruction and by the Director of Extension Teaching.
- b. Students will not be allowed to exceed a total of 16 points, including the points of extension courses, at one time, save with the special permission of the Committee on Instruction, for reasons of weight.
- c. Students desiring to count these courses toward the degrees of A.B. and B.S. must obtain in them a grade at least of C.

Before final choice of elective studies, all students should consult their advisers (see p. 63), the Committee on Instruction, and, in case of any doubt, the instructors in charge of particular courses as well. Electives must be chosen on some consistent plan. Conflicts between courses fall-

ing at the same hours are to be avoided by careful study of the Scheme of Attendance at the end of this volume, which has been drawn up with a view to making possible for every one the selection of a reasonable number of harmonious elective courses that shall not conflict in hours with each other or with prescribed courses. It often happens that some of the courses of one department form valuable supplements to certain courses of another, so that combinations of work under two or more departments are very desirable. In all such cases the best selections can be made only after consultation with officers of one or more of the departments concerned. This applies particularly to the major subject of 18 points.

I THE PROGRAM OF STUDIES FOR THE DEGREE OF BACHELOR OF ARTS

Unless their equivalents have been offered for admission the following courses are prescribed:

English A and B.....	12 points
History A.....	6 "
Latin A or Greek 5-6.....	6 "
Mathematics A.....	6 "
Modern Languages (see below).	
Philosophy A ¹	6 "
Physical Education A and B.....	4 "
Economics A.....	6 "
Chemistry 5-6 or Physics 1-2.....	6 "
Botany, Chemistry, Geology, Physics, Experimental Psychology, or Zoölogy: one full course in addition to Chemistry 5-6 or Physics 1-2 or any course in science that may have been offered for admission.....	6 "
Major subject of.....	18 "
Free electives to complete the total of.....	124 "

Requirements in Modern Languages Applying to Programs I and II

No modern language course in college is prescribed for the degrees of Bachelor of Arts and Bachelor of Science. Before being registered as seniors, all students, except those who have offered the complete requirement in Elementary Greek at entrance or who have taken Greek 1-2 and 3 in college, must satisfy the departments of Romance Languages and Germanic Languages that they have a working knowledge of French and German. In special cases, with the consent of the Committee on Instruction, Spanish or Italian may be substituted for French.

As a rule the departmental test will take the form of an oral examination in translation at sight. It may be taken during the month of March or the month of November before May 1 of the junior year.

A student who offers the complete requirement in Elementary Greek at

¹ Or, on recommendation of the department, Philosophy 61-62.

entrance or who takes Greek 1-2 and 3 in college will be obliged to stand the test in only one of the modern languages.

Students whose preparation in a modern language is inadequate for this test should elect, under the advice of the department, special courses that are designed to prepare for this examination.

II THE PROGRAM OF STUDIES FOR THE DEGREE OF BACHELOR OF SCIENCE

Unless their equivalents have been offered for admission the following courses are prescribed:

English A and B.....	12 points
History A.....	6 "
Mathematics A.....	6 "
Modern Languages (see above).	
Philosophy A ¹	6 "
Physical Education A and B.....	4 "
Grouped work in science amounting to at least.....	70 "

which must include:

A major subject of at least 28 points in one of the following natural sciences: Astronomy, Botany, Chemistry, Geography, Geology, Mineralogy, Physics, Experimental Psychology, and Zoölogy, or in Mathematics; and

Two minors of at least 12 points each, one in a subject allied to the major and one in a diverse subject, both to be chosen from the foregoing list with the addition of Anthropology, which should, as a rule, be taken only in connection with Botany or Zoölogy as a major.

Free electives to complete the total of..... 124 points

III GENERAL TWO-YEARS' COURSE, NOT LEADING TO A BARNARD DEGREE

This general course is designed to furnish the collegiate foundation for professional work in other schools of the University. It comprises from 62 to 74 points of work. The courses prescribed depend upon whether the candidate intends to transfer to the School of Architecture, the School of Practical Arts, or the School of Journalism.

Candidates who intend to transfer to the School of Architecture for courses leading to the degree of Bachelor of Architecture (see Architecture, p. 61 below), or to the School of Practical Arts in Teachers College for work leading to the degree of Bachelor of Science in Practical Arts should in general take the following courses unless their equivalents have been offered for admission:

English A or a more advanced course in rhetoric.....	6 points
English Literature: two half-year courses.....	6 "

¹ Or, on recommendation of the department, Philosophy 61-62.

French, German, Italian, Spanish: two half-year courses in each of two modern languages, preferably French and German.....	12 points
History A or a more advanced course in history.....	6 "
Physical Education A and B.....	4 "
Botany, Chemistry, Geology, Physics, or Zoölogy: two half-year courses in each of two natural sciences that have not been offered for entrance, at least.....	12 "
Elective courses to complete the total of.....	64 "

Candidates who intend to transfer to the School of Journalism (see Journalism, page 62 below) are required to take 74 points of work (including 4 points in Physical Education) in Barnard College as indicated in the following schedule:

First Year

English A1-A2.....	6 points
¹ A modern language course.....	6 "
Introductory Science 1-2 (with outside reading).....	6 "
History A1-A2.....	6 "
Philosophy A1-A2, or 61-62, or a science or a language ¹	6 "
Physical Education A1-A2.....	2 "
Politics 1-2.....	6 "
	<hr/> 38 points

Second Year

Economics A1-A2.....	6 points
English B5-B6.....	6 "
English B9-B10.....	6 "
English 19-20, or a continuation course in language.....	4 "
History 9-10.....	4 "
History 15-16.....	4 "
History 19-20.....	6 "
	<hr/> 36 points

IV COURSES IN THE GRADUATE FACULTIES AND PROFESSIONAL SCHOOLS OPEN TO BARNARD STUDENTS

Political Science, Philosophy, and Pure Science

Certain graduate courses in Columbia University under the Faculties of Political Science, Philosophy, and Pure Science are open, with the consent of the department concerned and the Committee on Instruction, to

¹ Candidates who enter under Foreign Language Requirement *c* (see page 19), must continue both French and German; those who enter under *d* must continue German and those who enter under *e* must continue French, in the first year.

specially qualified seniors. They may be counted towards the Bachelor's degree, or in case the student has more points than the number required for that degree they may, under certain circumstances, be credited towards the Master's degree.¹ Some of these courses are mentioned at the end of the departmental statements given below. For full information students are referred to the appropriate University Announcement.

Architecture

Certain courses in the School of Architecture are open to regular students in Barnard College, and may be credited towards the Barnard degree. They are described below in the departmental statement on page 91.

After two years of collegiate work in Barnard, amounting to at least 72 points' credit and including French 1, 2 or its equivalent, a student may transfer without examination to the School of Architecture in Columbia University and become a candidate for the degree of Bachelor of Architecture. The course in the School of Architecture leading to this degree includes 150 points of work and generally requires four years for its completion.

For full information, students are referred to the appropriate University Announcement.

Music

Courses in the history and theory of music and in composition, given at Columbia University, are open to regular students in Barnard College and may be credited towards the Barnard degree. They are described below in the departmental statement on page 98.

For full information students are referred to the appropriate University Announcement.

Students wishing to combine collegiate work with vocal or instrumental training may, while pursuing courses at Barnard, enroll as regular students at the Institute of Musical Art, Claremont Avenue and 122d Street. They must obtain the consent of the Dean of Barnard College and the Director of the Institute. Work at the Institute will not be counted towards the Barnard degree and must be paid for separately.

Education

Certain courses in the history and theory of education given by Teachers College are open to regular students in Barnard College and may be credited towards the Barnard degree. They are described in the departmental statement on page 87 below.

On account of the change in the entrance requirements of the School of Education, it will no longer be possible for a student to arrange her work

¹ See p. 15 of the Announcement of the Faculties of Political Science, Philosophy, and Pure Science.

in such a way as to earn a professional diploma from Teachers College at the same time as her academic degree from Barnard College. Beginning July 1, 1914, Teachers College ceased to matriculate in the School of Education candidates for any degree below that of Master of Arts, excepting in the departments of Elementary, Kindergarten, and Practical Arts education. All Barnard students desiring to enter the School of Education must first complete the work demanded for the Bachelor's degree under the Faculty of Barnard College. Under certain circumstances, however, seniors who have nearly completed the requirements for graduation may, while registered in Barnard College, elect one or more courses in the School of Education and have these credited later towards the degree of Master of Arts.¹ For full details regarding the work in Education the student is referred to the current Announcement of the School of Education.

Journalism

After two years of collegiate work in Barnard, amounting to at least 74 points' credit and including certain prescribed courses (see page 60), a student may transfer without examination to the School of Journalism of Columbia University and become a candidate for the degree of Bachelor of Literature. The course in the School of Journalism leading to this degree generally requires for its completion two years in addition to the two years of collegiate work in Barnard College.

For full information, students are referred to the Announcement of the School of Journalism.

Religion

Certain courses in the Union Theological Seminary are open, with the consent of the Committee on Instruction and the President of the Seminary, to specially qualified seniors, and may be counted towards the Barnard degree.

Philanthropy

Exceptional advantages are available for students desiring to specialize in economics, sociology, and social economy, in preparation for social and philanthropic work. Besides the courses given at Barnard in economics and social science, certain graduate courses in this department of Columbia University are open, with the consent of the department and of the Committee on Instruction, to specially qualified seniors. Because of the affiliation between the College and the New York School of Philanthropy, certain courses in the latter institution may also be pursued, with the consent of the Department of Economics and of the Committee on In-

¹ See p. 15 of the Announcement of the Faculties of Political Science, Philosophy, and Pure Science.

struction, and the approval of the Director of the School, by specially qualified seniors, and counted towards the Barnard degree. No extra tuition fee is required. The purpose of this School is to fit men and women for social service in either professional or volunteer work. It offers valuable courses in the housing problem, child helping agencies, the treatment of the criminal, family rehabilitation, the social settlement movement, and kindred subjects. By taking some of this work in her senior year a Barnard student may anticipate part of the requirements for the diploma of the School of Philanthropy.

ADVICE TO STUDENTS

At the opening of the year the incoming students shall register as is customary, and shall make out their elective blanks subject to the approval of the Committee on Instruction. During the months of November and December each member of the freshman class shall confer with the Dean, or with a Faculty adviser appointed by the Dean, regarding her studies and other matters that may be of interest to her. During the month of April, after the appearance of the catalogue, each freshman shall consult with any instructor she may choose regarding her election of courses for the sophomore year. No elective blank shall be considered by the Committee on Instruction that does not bear the signature of the adviser.

The Freshman Year

Before November 1 all deficient students shall consult with the Dean. In April students shall, as during the freshman year, fill out elective blanks subject to the approval of the adviser. The adviser may be any instructor in Barnard College whose work the student has taken in the freshman or the sophomore year, but should preferably be an instructor in the department in which the student means to elect her major subject, which should be chosen not later than the end of the sophomore year. Before May 1 elective blanks bearing the signatures of the adviser and the student shall, as usual, be submitted to the Committee on Instruction for approval.

The Sophomore Year

In April students shall make out elective blanks as in the preceding year. The adviser should be from the department in which the student has elected her major subject and should, as a rule, be the same as the adviser chosen at the end of the sophomore year. Elective blanks shall be filed in accordance with the usual regulations and submitted to the Committee on Instruction for approval. Whenever necessary, the Dean will consult with particular students.

The Junior Year

During the senior year students will be advised as necessary in individual cases. They should freely consult the Dean and their instructors, who will gladly give advice either as to the college courses they are taking or concerning possibilities in various lines of work after graduation.

The Senior Year

GENERAL REGULATIONS REGARDING EXAMINATIONS IN COURSE, CREDIT, AND ADVANCEMENT

Two series of examinations are held every year, one in January and the other in May. These are the only stated examinations. In 1916, the mid-year examinations begin on Wednesday, January 26, the final examinations on Monday, May 22.

All students are expected to attend regularly and promptly all the exercises in the courses for which they are registered. Any considerable amount of absence or tardiness will result in the lowering of a student's mark or the loss of one or more points of credit for the course. At the end of each term each student shall file in the Registrar's office, on blanks provided for that purpose, a list of her absences and tardinesses with the reasons therefor. After considering these excuses and the reports from the instructors, the Committee on Instruction will adjust marks and credits.

Special examinations are held as follows: in the first week of March of each year, and within the two weeks preceding the opening of the College in the fall.

Such examinations are open, by permission of the Provost, on recommendation of the Committee on Instruction, to:

(a) Students who have received F (or D in excess of 6 points), provided that, in the opinion of the instructor and that of the Committee on Instruction, the term work has been good enough to make repetition in class or laboratory unnecessary. Ordinarily F (or D in excess of 6 points) in prescribed work involves repetition of the course;

(b) Students who have been absent, for imperative reasons, from the stated examination in any course provided their term work has been satisfactory;

(c) In rare instances, for reasons of weight, to other students.

In all cases application for permission to take a special examination must be made in writing.

For any such series of examinations, or any such single examination taken at any time other than the stated examination period immediately following the conclusion of the course or courses involved, a fee of \$5 must be paid to the Bursar before the student is admitted to the examination.

The student's performance in a course is rated according to the following grades: A, excellent; B, good; C, fair; D, poor; F, failure.

No student may count for promotion from any class to the next higher class more than six (6) points of D work or may be credited with more than six (6) points of D work during her senior year. In case more than four years is required for her degree, not more than twenty-four (24) points of D work altogether may count for the degree. Of several courses in which a student is marked D she may choose the ones to be counted.

At the end of every half-year, when all the reports are filed in the Registrar's office, additional credit for high standing is given as follows:

The mark A in courses aggregating six points of work (no course to be counted twice) entitles the student to one point of extra credit, provided she has satisfactorily completed all the work of the half-year, and has not fallen below the mark B in any course.	Additional Credit for High Standing
---	--

Matriculated students whose record as to entrance conditions and the completion of prescribed courses is satisfactory to the Committee on Instruction, are classified as follows:

Freshmen, those who have completed less than 26 points of college work;

Sophomores, those who have completed 26 points;

Juniors, those who have completed 58 points;

Seniors, those who have completed 90 points.

**Classification
of Students**

In all cases the requirements for promotion must be met in full before the beginning of the academic year.

A student who fails to meet the requirements for advancement from one class to another may, with the consent of the Provost, on the recommendation of the Committee on Instruction, remain in College and repeat the course or courses in which her deficiency exists, or, in the case of elective courses, other courses equivalent thereto in time. She may not, however, register as a special student.

Should a student fail of advancement in two successive years, she shall be permanently dismissed from the College, unless for reasons of weight, the Provost, on the recommendation of the Committee on Instruction, shall otherwise determine.

SCHOLARSHIPS

There are, altogether, forty-one scholarships and five special funds for the benefit of students who need financial aid. The annual income of each of these scholarships, stated in the list on pages 65-69, is applicable to the fees of the year. Under certain circumstances, holders of scholarships which do not cover the entire tuition fee may receive supplementary grants from the special funds.

**Number
and Value**

The scholarships are of two sorts, competitive and non-competitive. Some of the competitive scholarships are awarded to entering freshmen for excellence in entrance examinations. Others are awarded to students already in Barnard for excellence in their college work. The non-competitive scholarships are awarded to students needing financial aid, and, as a rule, only to those who have passed at least one year in college. They are held, unless otherwise stated, for one year only.

Classification

Two scholarships may not be held by the same person. Should two

scholarships be assigned to the same student in one year, she must at once choose which she will retain. - If a student fail to maintain a grade of at least C in all courses which she pursues, or if for any other reason she show herself an unsatisfactory candidate, she shall forfeit her scholarship and, in the case of non-competitive scholarships, shall be ineligible for re-election the following year. No student with entrance conditions unremoved, or with a grade below C in the year previous to that in which she is asking for help, shall be eligible for a scholarship. For competitive entrance scholarships a complete set of entrance examinations, *i.e.*, a total of fourteen and a half (14½) units, is required. These examinations should, as a rule, be taken in June, since the scholarships are generally awarded before the beginning of the first half-year; they may be taken, if the candidate so desire, in two successive Junes. Scholarships vacant in February may, however, be awarded to candidates entering at that time on the January examinations.

Before the first of April of each year all applications for non-competitive scholarships, accompanied with full credentials, must be filed at the Dean's office upon special blanks to be obtained there. Candidates for the competitive scholarships to be awarded on the basis of the June examinations should, in their application to the Secretary of the College Entrance Examination Board (see p. 21), mention the Barnard College scholarships for which they are competing. For the Pulitzer Scholarships, the Martha T. Fiske Scholarship, and the Jessie Kaufmann Scholarship, application must be made to the Secretary of Barnard College before the first of May. In order to qualify for the receipt of her stipend, the holder of a scholarship should report at the office of the Registrar not later than the first day of the academic year.

COMPETITIVE SCHOLARSHIPS

These, subject to the foregoing general regulations for scholarships, are as follows:

- 1. *Open to entering freshmen:*
 - Trustees' Competitive Scholarship (\$200)..... I
Awarded annually by the Board of Trustees to the student who in June passes the best complete entrance examinations in all subjects. It may be held for one year only. In case there is no award in June, this scholarship may be awarded the following February to a candidate entering at that time. In this event, it may be held for one half-year only.
 - Jessie Kaufmann Scholarship (\$170)..... I
Founded in 1902 by Mr. Julius Kaufmann in memory of his daughter, Jessie Kaufmann. Awarded on the merits of the entrance examinations to a student who, after careful investigation, is found to have no relative able to assist her financially. It may be held for the entire college course.

Brooklyn Scholarships (\$150 each).....

12

Founded in 1895 by the Trustees of Columbia University in recognition of the gift to Columbia University by President Low of a memorial building for the University Library. They are open to students who have received their training in either the public or the private schools of Brooklyn, N. Y., and are residents of that city. Three of these scholarships will be awarded annually to qualified competitors who pass in June, without conditions, the best complete entrance examinations in all subjects. They may be held for the entire college course, but a holder, while retaining the title "Brooklyn Scholar," may transfer the income to any properly qualified candidate from Brooklyn without having her action made a matter of public record.

Lucille Pulitzer Scholarships (for annual income, see below)....

8

Founded by the late Joseph Pulitzer in memory of his daughter, Lucille Pulitzer. They are of two kinds, Residence Scholarships and Non-residence Scholarships.

The Residence Scholarships carry an income of \$600 a year apiece and are open to women who are not residents of New York City or its vicinity. They are awarded on the merits of entrance examinations taken under the College Entrance Examination Board and on the candidate's general character and power of leadership. The examinations may be taken, if the candidate so desire, in two successive Junes. The scholarships may be held throughout the college course, provided the recipients continue to maintain a high rank in their college work. The holders are required to reside in Brooks Hall, the Barnard hall of residence. Five of these scholarships are now available. One will be awarded in 1915.

The Non-residence Scholarships are awarded to students entering the College from the city of New York who are found to have passed excellent entrance examinations and to be worthy of financial aid. They may be held for the first three years of the college course only.

The first (*a*) founded in 1899, carries an annual income of \$400 and will be awarded in 1915, 1918, and corresponding years.

The second and third, given in 1903, carry annual incomes of \$325 each; (*b*) will be awarded in 1916 and 1919, (*c*) in 1917 and 1920, and corresponding years.

Martha T. Fiske Scholarship (\$200).....

I

Founded in 1911 by Miss Anna E. Smith, in memory of her sister, Mrs. Martha T. Fiske-Collord. It is awarded, on the basis of scholarly ability and general character, to some deserving candidate not a resident of New York City or its

suburbs, and may be held throughout the college course, provided the recipient continues to maintain a satisfactory standing.

2. *Open to students who have passed at least one year in college:*

Eleonora Kinnicutt Scholarship (\$200)..... I

Founded in 1911 in memory of Mrs. Francis P. Kinnicutt, who was a Trustee of Barnard College. It is awarded at the end of the freshman year to a student of exceptionally high standing, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1915 and 1918.

Emma A. Tillotson Scholarship (\$200)..... I

Founded in 1910 by the late Mrs. Luther G. Tillotson. It is awarded at the end of the freshman year to a student of exceptionally high standing, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1916 and 1919.

William Moir Scholarships (\$200 each)..... 2

Founded in 1912 by the late Mrs. William Moir, in memory of her husband.

The first (a) is awarded at the end of the freshman year to a student of exceptionally high standing who is in need of assistance, and may be held for three years, provided the recipient continues to maintain a high rank. It will be awarded in 1917 and 1920.

The second (b) may be awarded to a student of any class who has shown exceptional scholarly ability and who is in need of assistance.

NON-COMPETITIVE SCHOLARSHIPS

These, subject to the general regulations for scholarships, are as follows:

Ella Weed Scholarship (\$150)..... I

Founded in 1895 by the pupils of Miss Anne Brown's School in memory of Miss Ella Weed, who was chairman of the Academic Committee of the Board of Trustees of Barnard College during the first five years of its existence.

Veltin School Scholarship (\$150)..... I

Founded in 1905 by the alumnae of Mlle. Veltin's School.

Jennie B. Clarkson Scholarship (\$150)..... I

Founded in 1898 by the late Mrs. W. R. Clarkson.

Emily James Smith Scholarship (\$120)..... I

Founded in 1899 by Miss Emily H. Bourne in honor of Miss Smith, then Dean of Barnard College. It is awarded in conference with the founder.

Anna E. Barnard Scholarship (\$150)..... I

Founded in 1899 by Miss Emily H. Bourne in honor of

- Mrs. John G. Barnard. It is awarded in conference with the founder.
- Brearley School Scholarship (\$120)..... I
 Founded in 1899 by pupils and former pupils of the Brearley School.
- Eliza Taylor Chisholm Memorial Scholarship (\$120)..... I
 Founded in 1901 by the Alumnae Association of Miss Chisholm's School, which Association reserves the privilege of precedence for such candidates as it may recommend.
- Graham School Scholarship (\$120)..... I
 Founded in 1907 by the Graham Alumnae Association.
- Mrs. Donald McLean Scholarship (\$150)..... I
 Founded in 1906 by the New York Chapter of the Daughters of the American Revolution. It is awarded, in conference with a representative of the Chapter, to a deserving student who agrees to pursue the study of history (chiefly that of the United States) continuously throughout her college course.
- Emma Hertzog Scholarship (\$150)..... I
 Founded in 1904 by gifts from residents of Yonkers, N. Y. It is awarded in conference with the Faculty of the Yonkers High School, to a graduate of that school who is entering Barnard College.
- Mrs. Henry Clarke Coe Scholarship (\$160)..... I
 Founded in 1910 by the National Society of New England Women, now the New York City Colony of the National Society. It is awarded, on the nomination of the chairman of the Scholarship Committee of the New York City Colony, to a student from New England or of New England parentage, and after the award is once made the Society requires from the beneficiary full obedience to discipline and the highest ideals of scholarship. This may be awarded to an entering freshman.
- Mary Barstow Pope Scholarship (\$200)..... I
 Founded in 1913 in memory of Mary Barstow Pope, sometime teacher in Miss Chapin's School, by her friends, her fellow-teachers, and her pupils. It is open to any undergraduate of Barnard College for the whole or any part of her course, and is awarded on the nomination of a self-perpetuating committee representing the founders.
- Charles E. Bogert Memorial Scholarship (\$200), and
 Anna Shippen Young Bogert Memorial Scholarship (\$250)..... 2
 Founded in 1913 by the late Mrs. Annie P. Burgess. They are awarded to worthy and deserving students of good Christian character who are unable to pay their own expenses.

SPECIAL FUNDS FOR THE AID OF NEEDY AND DESERVING STUDENTS

Arthur Brooks Fund.

A fund of \$5000, given in 1897 by Miss Olivia E. Phelps Stokes as a memorial of the Reverend Arthur Brooks, D.D., Rector of the Church of the Incarnation and Chairman of the Board of Trustees of Barnard College during the first six years of its existence.

Fiske Scholarship Fund.

A fund of \$5000 given by the late Mrs. Martha T. Fiske-Collord, the income of which is placed at the disposal of the Dean of Barnard College.

George W. Smith Scholarship Fund.

A fund of \$5000 given in 1906 by the late Mrs. Martha T. Fiske-Collord as a memorial to Mr. George W. Smith, who was a Trustee of Barnard College. The income of the fund is placed at the disposal of the Dean of the College.

Charles Stewart Smith Scholarship Fund.

Established in 1911 in memory of the late Charles Stewart Smith, who was a Trustee of Barnard College. It provides an annual income of \$250, which is used to assist needy and deserving students.

Scholarship Fund.

A fund of \$9680, established by general subscription through the Scholarship Committee of the Board of Trustees.

GRADUATE FELLOWSHIP

Established by an anonymous donor in 1912. It is of an annual value of \$600. The holder is to pursue a year of graduate study at Columbia or any other university or college of approved standing. This Fellowship is awarded each year as an academic honor to that member of the graduating class of Barnard College, who, in the opinion of the Faculty, shows most promise of distinction in her chosen line of work. Should the recipient prove in no need of financial assistance, she may retain the title and honor but resign the income, which will then be used for other fellowships or scholarships. This Fellowship is not to be applied for, but is awarded each year as soon as possible after the mid-year examinations. Students who have graduated in February are eligible, as well as those who are to graduate in June.

PRIZES

The following prizes are awarded annually, on the recommendation of the appropriate departments of the Faculty of Barnard College, in accordance with the special conditions named below. No prize will be awarded to any student who falls below grade C in any course during the year in which she is a competitor.

HERRMAN BOTANICAL PRIZE

A prize of \$50, founded by the late Mrs. Esther Herrman, is awarded annually to the most proficient undergraduate student in botany.

KOHN MATHEMATICAL PRIZE

A prize of \$50, founded by Mrs. S. H. Kohn, is awarded annually to a senior for excellence in mathematics. Competitors for this prize must have pursued mathematics continuously during their college course.

THE JENNY A. GERARD MEDAL

The Jenny A. Gerard Gold Medal, given in 1908 by the Society of the Colonial Dames of America in memory of Mrs. James Gerard, late President of the Society, is awarded annually to the undergraduate student of American birth in Barnard College who is most proficient in American Colonial History.

SPERANZA PRIZE IN ITALIAN

A prize of \$100, founded by a former student in memory of the late Carlo Leonardo Speranza, Instructor and Professor of Italian at Barnard from 1890 until 1911, is awarded annually to a student in Barnard College for excellence in Italian.

VON WAHL PRIZE

A prize of \$100, established in memory of Constance von Wahl, 1912, President of the Undergraduate Association, will be awarded in 1915 to that member of the graduating class who, in the opinion of the Faculty and of her fellow-students, has best exemplified those high qualities of character which Constance von Wahl herself represented during her college life—that is, devotion to high ideals of duty and helpfulness, and effective service to her fellow-students and to the College.

The following prizes of Columbia University are by their terms open to students of Barnard College.

THE BUNNER MEDAL

The H. C. Bunner Gold Medal, established by the friends of the late Henry Cuyler Bunner, is awarded annually at Commencement to the candidate for a Columbia degree who shall present the best essay on an assigned subject in American literature. The award will be made by a committee to be appointed by the President. The subject for the essay to be handed in May 1, 1915, is "Edward Everett as an Orator"; in 1916, "American Comedy from 1800 to 1865."

EARLE PRIZE IN CLASSICS

A prize of \$50, established in memory of Mortimer Lamson Earle, Instructor in Greek in Barnard College from 1889 to 1895 and from 1898 to 1900, and Professor of Classical Philology from 1900 to 1905, is open for annual competition to all candidates for the degree of Bachelor of Arts. It is awarded partly on the basis of the regular work of the year in Greek and in Latin, partly on the basis of a special examination. The special examination covers specified portions of Greek and Latin literature, sight reading in Greek and in Latin, and prose composition in Greek and in Latin. The special subjects for 1916 are Aristophanes, *Acharnians*, and Cicero, *Pro Murena*.

For the award in 1916, the examination will be held in January. Students are urged to do much of their work for the examination during the preceding summer vacation.

THE CAROLINE PHELPS STOKES PRIZE

The Caroline Phelps Stokes Prize of \$40 is awarded annually at Commencement to that student who, having been regularly enrolled in Columbia College or Barnard College or Teachers College as a candidate for an academic degree, for not less than one academic year, shall be deemed to have written the best essay upon an assigned topic bearing upon the rights of man. The essay to be handed in May 1, 1915, should deal with some particular aspect of the general principle of the right of the weaker to protection from or support by the stronger; as for example (1) the control of trusts or combinations in restraint of trade, whether capitalistic or labor, (2) employers' liability, (3) old age insurance. The subject for 1916 is the abstract principle of the rights of man as applied to the position of woman, (1) economically—economic independence, equal pay for equal work; (2) politically—the question of suffrage; (3) in the family—the question of marriage and divorce.

HONORS

Departmental honors are awarded for high excellence in the work of any department, under the following regulations:

Depart- mental Honors	No honors shall be awarded to freshmen or special students or to any student whose work falls below C in any course taken by her in the year of her candidacy. No honors shall be awarded to students on elementary courses only and in no case may more than one full year elementary course be counted in the total necessary for honors.
--------------------------------------	--

First year honors in any department shall be awarded at the end of any year to any student, of at least sophomore standing, who has taken at least 12 points of work in that department, of which 12 points at least 6 points shall be of grade A and none below grade B, and who has done extra work required by the department, and who is certified by the department as worthy of honors.

Second year honors in any department shall be awarded to a student of at least junior standing, who has taken at least 18 points of work in that department, of which 18 points at least 12 points shall be of grade A and none below grade B, who has done extra work required by the department, and is certified by the department as worthy of honors.

Third year honors in any department shall be awarded at graduation to any student who has taken at least 24 points of work in that department, of which 24 points at least 18 points shall be of grade A and none below grade B, who has done extra work required by the department, and is certified by the department as worthy of honors.

With the consent of the departments concerned and of the Committee on Honors, part of the 12, 18, or 24 points of work required for departmental honors may be taken in an allied department.

Final honors in any department shall be awarded to any student who has obtained honors in that department for three successive years.

Candidates for honors shall confer with the department concerned and shall announce their candidacy in writing to the Registrar not later than December 10 of the academic year in which they wish to take honors.

The amount of extra work required for honors shall correspond approximately to that accepted for one point of regular college credit.

For general excellence in the work of the college course honors may be awarded at graduation, under the following regulations:

The Faculty of Barnard College, on the recommendation of the Committee on Honors, may recommend that the degree CUM LAUDE be awarded to any student who has obtained grade A in at least 62 points of the work of the college course, and who has not fallen below grade B in more than 31 points of the work of the college course, and who has twice received departmental honors; or to any student who, without receiving departmental honors, has obtained grade A in at least 74 points of the work of the college course, and who has received no grade below C, and who has not received C in more than 12 points of work.

Degrees
with
Honor

The Faculty of Barnard College, on the recommendation of the Committee on Honors, may recommend that the degree MAGNA CUM LAUDE be awarded to any student who has obtained grade A in at least 90 points of the work of the college course, and who has never fallen below grade C, and who has received final honors in some department, or first and second year honors in each of two departments; or to any student who, without receiving departmental honors, has obtained grade A in at least 102 points of the work of the college course and who has received no grade lower than B.

Points of extra credit gained by high standing are not to be counted in these totals.

RESIDENCE HALL

Brooks Hall, the residence hall for Barnard College students, will open on Monday, September 25, 1915, and will close on Saturday, June 10, 1916.

Candidates for admission or students who wish to secure accommodations in Brooks Hall during the week of the September entrance or deficiency examinations should make arrangements directly with the Secretary of the Hall, not later than September 1.

Full information in regard to the situation and cost of rooms, the advance deposit, the charge for electric light, and the residence scholarships is published in a separate pamphlet, to be had on application to the Secretary of Brooks Hall. All correspondence regarding accommodations in Brooks Hall should be addressed to the Secretary of the Hall, 607 West 116th Street, New York, N. Y. For the dormitory fees see p. 55.

The post-office address for residents is Brooks Hall, 607 West 116th Street, New York, N. Y.

For regulations in regard to the residence of students who do not live in Brooks Hall, see page 16.

HEALTH AND PHYSICAL TRAINING

The University Medical Officer, Dr. William H. McCastline, supervises the sanitation of the College and gives personal advice to the students concerning their health. A trained nurse, who lives in Brooks Hall, works under Dr. McCastline's direction in promoting the health of both resident and non-resident students.

Students of Barnard College have the use, at certain hours, of the Thompson Gymnasium of Teachers College. They have also, on Milbank Quadrangle, a practice field for hockey and basketball, and tennis courts. A physical examination is required of each student upon entrance and at the end of the work in physical education prescribed for college students. On the basis of this examination advice is given as to the kind and amount of exercise best adapted to her needs. Each student must also consult with the instructor at least once a month during her freshman and sophomore years. As far as possible the work in physical education is conducted in the open air.

THE UNIVERSITY LIBRARY

The University Library is open each week-day (except Labor Day, Thanksgiving, Christmas, New Year's Day, Good Friday, and Independence Day) from 8.30 A.M. until 11 P.M., October-June; and until 10 P.M., July-September. All officers, students, and graduates of all departments of the University have free access to the Library and may draw books for home use.

The Library contains about 550,000 volumes, exclusive of unbound pamphlets and duplicates, and some 75,000 German dissertations. About 10,000 carefully selected reference books and many of the most important works on all subjects, in standard editions, representing the leading authors in all literatures, are placed in the general reading-room directly accessible to all readers.

For the convenience of the undergraduates of Barnard College there is also maintained in the Ella Weed Memorial Reading-room at Barnard College a carefully selected reference library of about 9400 volumes.

An accurate catalogue of the entire Library by authors and subjects is on cards accessible to readers.

PUBLIC LECTURES

Barnard College students may avail themselves of the opportunities offered by the numerous public lectures which are given each year at Columbia University, ordinarily by persons of distinction who are not members of the teaching staff. Students of the University may also frequently enjoy important dramatic and musical performances at reduced cost.

UNIVERSITY PRESS BOOKSTORE

A University bookstore is maintained under the auspices of the Columbia University Press, where officers and students may purchase books and stationery at stated discounts from list prices.

CHAPEL SERVICE

Chapel service is held on Monday and Thursday of each week at 12 o'clock in the college assembly room. The service lasts about twenty minutes and is conducted by the Dean, with an address by some clergyman or lay speaker, or by an officer of the University. Attendance is voluntary.

In St. Paul's Chapel, the chapel of Columbia University, service is held every week-day except Saturday and Wednesday at 12 o'clock and on Sunday afternoon at 4 o'clock. At these services also attendance is voluntary.

Special University services are held in St. Paul's Chapel on the Wednesday preceding the Thanksgiving recess and on the first Wednesday of the second half-year.

STUDENT ORGANIZATIONS

Under the system of self-government in use in the College, the various student organizations are supervised by the Student Council, subject to the general approval of the Faculty. The Council controls the schedules of meetings and entertainments and administers rules of eligibility for office-holding and participation in college plays.

STATISTICS

1889 to 1890	1894 to 1895	1899 to 1900	1904 to 1905	1905 to 1906	1906 to 1907	1907 to 1908	1908 to 1909	1909 to 1910	1910 to 1911	1911 to 1912	1912 to 1913	1913 to 1914	1914 to 1915
UNDERGRADUATES, REGULAR:													
Seniors.....	9	40	83	81	63	59	68	62	53	72	86	*97	*123
Juniors.....	18	40	71	78	110	110	108	122	144	154	144	147	110
Sophomores.....	18	37	75	97	88	95	114	109	115	132	155	132	101
Freshmen (regular).....	4	54	110	111	130	135	161	188	185	226	184	252	240
" (partly regular).....	10	..	..	..	..	..	..	..	..	..	..	..	..
14	71	171	339	367	391	405	451	481	497	584	569	628	664
SPECIAL STUDENTS:													
Matriculated.....	..	21	27	18	22	35	25	24	26	20	16	22	32
Non-matriculated.....	..	..	..	5	6	13	22	30	24	36	33	34	32
Departmental (1889-1896).....	22	..	..	..	..	..	..	..	..	..	..	..	..
Music students (1896-1904, 1914-1915)....	..	41	..	..	..	..	..	..	..	..	..	..	5
22	29	62	27	23	28	48	47	54	50	56	49	56	69
..	19	82	..	..	..	..	..	..	..	..	..	..	..
GRADUATE STUDENTS (1890-1900).....													
TOTAL STUDENTS PRIMARILY REGISTERED AT BARNARD.....													
36	119	315	366	390	419	453	498	535	547	640	618	684	733
STUDENTS FROM COLUMBIA UNIVERSITY.....													
..	..	..	62	57	40	38	36	59	62	59	45	41	28
..	..	18	77	95	165	167	182	200	201	146	136	*125	*108
..	..	..	..	..	..	..	..	..	..	..	2	1	..
STUDENTS FROM SCHOOL OF PHILANTHROPY.....													
TOTAL STUDENTS FROM OTHER PARTS OF THE UNIVERSITY.....													
..	..	18	139	152	205	205	218	259	263	205	183	167	136
36	119	333	505	542	624	658	716	794	810	845	801	851	869
TOTAL REGISTRATION.....													
DEGREES CONFERRED:													
A.B.....	8	39	83	75	76	97	98	88	103	114	136	113	..
B.S.....	..	..	..	..	..	..	..	2	..	4	3	7	..
A.M. (1894-1900).....	..	18	..	..	..	..	..	..	..	..	..	..	..
Ph.D. (1895-1900).....	1	1	..	..	..	..	..	..	..	..	..	..	..

TOTAL BACHELORS' DEGREES CONFERRED 1893-1914: A.B., 1354; B.S., 16.

* In 1913-14, 18 and in 1914-15, 3 Barnard seniors registered at Teachers College for the professional diploma are included in the senior figures and not among the Teachers College students.

DEPARTMENTAL STATEMENTS

The following general regulations apply to all courses. The paragraphs on "The Program of Studies," pp. 55-60 should be carefully read.

When an announced course has not been applied for by at least three candidates for a degree, the instructor may withdraw it.

Where the hours for laboratory work are not given either in the departmental statement or in the scheme of attendance, they must be arranged after consultation with the officer in charge of the course.

Courses designated by capital letters are prescribed. Elective courses are designated by numbers, odd numbers for the first half-year courses and even numbers for the second half-year courses. A compound course is therefore designated by an odd number and the succeeding even number. The numbers from 1 to 99 inclusive are given to courses open only to undergraduates; the numbers from 101 to 199 inclusive are given to courses open to both undergraduates and graduates; the lower numbers in each case being used for the introductory courses.

In the statement of each course the prerequisites are indicated. When no department is named it is to be assumed that the reference is to a numbered course in the same department.

A hyphenated course (e.g., History A1-A2) is regarded as a full-year course of which the first half is always assumed to be a prerequisite for admission to the second half, and, except for reasons of weight, and with the written consent of the instructor, no credit will be given for work dropped at the mid-years or before the completion of the course. A course of which the index signs are separated by a comma (e.g., English 1, 2) is regarded as a divisible course of which the first half-year may be taken separately. *Admission to the second half of a divisible course is granted only when all the prerequisites have been met and the written consent of the instructor obtained.*

Courses marked with an asterisk (*) are given at Columbia University. *The number of points credit to be assigned for an advanced course numbered over 100 and given at Columbia University is to be determined in each case by the Committee on Instruction of Barnard College in conference with the instructor or the representative of the department concerned.*

Courses marked with a dagger (†) are given at Teachers College. *Work at Teachers College mentioned herein may be pursued only by regularly enrolled students of Barnard College and only when counting for a Barnard College degree. Certain courses not here specified as being open at Teachers College may, through the courtesy of Teachers College and with the consent*

of the Committee on Instruction, be taken by such students. All special students of whatever class should enroll at Teachers College for Teachers College courses.

For further detailed information in regard to topics, text-books, or methods in any particular course, students are referred to the instructors.

INTRODUCTORY COURSES

1-2—Introductory Survey of Natural and Social Sciences. Professors REIMER, MALTBY, JACOBY, OGILVIE, RICHARDS, CRAMPTON, MR. SHENTON, and Professor MONTAGUE. 4 points for the year (for Journalism students only, extra reading will be assigned in order to make this course a 6-point course for the year and parallel to the corresponding course in the School of Journalism).

M., W., and F. at 1.

This course consists of lectures and assigned readings in each of the following subjects: chemistry, physics, astronomy, geology, botany, zoölogy, sociology, and philosophy. It is designed to give all students a general idea of the typical problems, methods, and results of the sciences treated and to afford students intending to specialize in science a basis for making an intelligent choice of subject. This course cannot be counted as fulfilling the prescribed requirement in science for the A.B. or the B.S. degree

ANTHROPOLOGY

1—General Introductory Course. Professor BOAS and DR. GOLDENWEISER. 3 points.

M., W., and F. at 1.

Open to juniors and seniors.

The peoples of Europe.—Antiquity of man; early migrations; early history of Europe and Asia; the development of cultural types in Africa, Australia, the Islands of the Pacific Ocean, and America.

2—General Introductory Course. Professor BOAS. 3 points.

M., W., and F. at 1.

Open to juniors and seniors.

This course will treat of the types of man as determined by race and environment, economic condition, development of industrial arts, languages, social organization, religions, as found in primitive and more advanced society.

Courses 101, Introduction to Anthropology, Professor BOAS; 102, Methods of Anthropological Research, Professor BOAS; 104, Prehistoric Archæology of America, Professor SAVILLE; 105-106, Anthropometry, Professor BOAS; 111-112, Archæology of Mexico and Central America, Professor SAVILLE; 113-114, Archæology of Northwestern South America, Professor SAVILLE; 117-118, American Languages, Professor BOAS; 129-130, Ethnography of Africa and the Islands of the Pacific Ocean, Dr. GOLDENWEISER; 131-132, Ethnography of Europe, Professor BOAS; 133-134, Ethnography of America and Siberia, Dr. GOLDENWEISER; 137-138, General Ethnology: Material Culture, Dr. GOLDENWEISER; 139-140, General Ethnology: Social Organization and Religion, Dr. GOLDENWEISER, given at Columbia University, are open, with the consent of the Department of Anthropology and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Philosophy, Psychology, and Anthropology.

Architecture. See Fine Arts

ASTRONOMY

1, 2—General Astronomy, Introductory Course. Professor JACOBY. Lectures, 4 points, with third hour, 6 points.

Tu. and Th. at 1 and a third hour to be arranged during part of the year in the evening, at the Wilde Observatory.

Prerequisite: Mathematics **A1, A2**.

This course is introductory and descriptive, intended for students who do not desire to specialize. The lectures are illustrated by experiments and the stereopticon. Observatory work includes observation of the sun and moon, planets, satellites, nebulae, and stars.

Course **103, 104**, Practical Astronomy, Professor JACOBY, given at Columbia University, is open, with the consent of the Department of Astronomy and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Mathematical and Physical Science.

BOTANY

51-52—Principles of the Morphology and Physiology of Plants. Professor RICHARDS, Miss LATHAM, and Miss STEWART. 2 lectures, 4 hours of laboratory work. Demonstrations to accompany lectures. 8 points.

Lectures M. and F. at 9. Demonstrations and conferences W. at 9. A special laboratory section will be arranged on two afternoons in the week for students who have passed the entrance examination in botany and wish to obtain full credit for the course.

Laboratory fee \$2.50.

53-54—Comparative Morphology and Development of Plants, Study of Types. Professor HAZEN and Miss STEWART. 2 lectures, 4 or 6 hours of laboratory work. 8 or 10 points.

Tu. and Th. at 10.

Laboratory fee, \$2.50.

Prerequisite: Course **51-52**. Course **53-54** is not open to freshmen.

55-56—Structure and Relationship of Flowering Plants. Professor HAZEN. 1 hour lecture or conference, 4 or 6 hours of laboratory work. 6 or 8 points.

Hours to be arranged.

Laboratory fee, \$2.50.

Prerequisite: Course **51-52** or Entrance Botany.

This course is designed to give practice in the recognition of characteristic floral types. Field work may be substituted for some of the laboratory work.

153—Anatomy of Vascular Plants. Miss LATHAM. 2 lectures and a minimum of 6 hours of laboratory work. 5 points.

Tu. and Th. at 11.

Laboratory fee, \$2.50.

Prerequisite: Course **53-54** or **55-56** except for seniors on consultation with the instructor.

154—Physiology of Plants from Standpoint of Nutrition. Professor RICHARDS and Miss LATHAM. 2 lectures and a minimum of 6 hours of laboratory work. 5 points.

Tu. and Th. at 11.

Laboratory fee, \$2.50.

Prerequisite: Course 153 and some knowledge of chemistry.

Courses 154 and 156 are open to students only after consultation with the instructor.

Courses 154 and 156 are given in alternate second half-years.

[156—Physiology of Plants from Standpoint of Growth. Professor RICHARDS and Miss LATHAM. 2 lectures and a minimum of 6 hours of laboratory work. 5 points.

Laboratory fee, \$2.50.

Prerequisite: Course 153 and some knowledge of chemistry.

Not given in 1915-16.]

158—Structure and Development of Algæ. Advanced course. Professor HAZEN. 1 lecture and 6 or 8 hours of laboratory work. 4 or 5 points.

Hours to be arranged.

Laboratory fee, \$2.50.

Prerequisite: Courses 51-52 and 53-54.

159—Structure and Development of Fungi. Advanced course. Professor RICHARDS. 1 lecture and 6 or 8 hours of laboratory work. 4 or 5 points.

Hours to be arranged.

Laboratory fee, \$2.50.

Prerequisite: Courses 51-52 and 53-54.

This course includes practice in culture methods.

Courses 158 and 159 are given either the first or second half-year to suit the convenience of the instructors and students.

160—Embryology and Laboratory Methods. Practice in methods of technique, with the study of the embryology of one or more types. Professor HAZEN and Miss LATHAM. 8 hours of laboratory work with occasional lectures and outside reading. 4 points.

Hours to be arranged.

Laboratory fee, \$2.50.

Prerequisite: Course 153; parallel: Course 154 or 156.

161, 162—Advanced Physiology and Morphology. Professors RICHARDS, and HAZEN, and Miss LATHAM.

Laboratory fee, \$2.50 for each half-year.

Work will be arranged to suit the needs of the students, and credit will be given according to the amount accomplished. While the topics assigned in this course usually involve only individual work of an advanced nature, lectures will be given and reading assigned, if a sufficient number of properly qualified students desire them. Some form of essay is usually demanded in connection with the other work.

Open to students only after consultation with the instructor. With the permission of the instructor this course may be taken in successive years.

Journal Club. The advanced students and instructors meet to read and discuss recent books and papers.

CHEMISTRY

5-6—General Inorganic Chemistry. Professor REIMER, Miss KELLER, Miss TURCK, and Miss TILT. 5 hours, including lectures, discussions, and laboratory work. 6 points.

M., W., and F. at 11. Laboratory work, Tu., W., or Th., 2-4.30; in order to obtain full credit for the course, students who have passed the entrance examination in chemistry must take the special laboratory course on M., 2-4.30.

Laboratory fee, \$4.00.

63—Qualitative Analysis. Miss KELLER. 3 lectures and 8 hours of laboratory work. 7 points.

Tu., Th., and F. at 10; laboratory work, 8 hours, to be taken on M., Tu., and Th. afternoons, 1-4.30.

Laboratory fee, \$6.00.

Prerequisite: Course 5-6.

The lecture work of this course consists of a study of the elements, especially of the metals, and of methods of qualitative analysis.

64—Quantitative Analysis. Miss KELLER. 3 lectures and 8 hours of laboratory work. 7 points.

Tu. Th., and F. at 10; laboratory work, 8 hours, to be taken on M., Tu., and Th. afternoons, 1-4.30.

Laboratory fee, \$6.00.

Prerequisite: Courses 5-6 and 63.

This course deals with fundamental quantitative methods and with such theoretical problems as are involved in analytical processes.

41-42—Organic Chemistry, Elementary Lecture Course. Professor REIMER. 3 hours. 6 points.

Tu. and Th. at 9 and a third hour to be arranged.

Prerequisite: Courses 5-6 and, except for reasons of weight, 63, 64. It is urged that Course 43-44 be taken with this course.

43-44—Organic Chemistry, Elementary Laboratory Course. Professor REIMER. A minimum of 6 hours. 6 points.

Hours to be arranged.

Laboratory fee, \$15.00.

Prerequisite: Courses 5-6, 41-42, and, except for reasons of weight, 63, 64. Recommended as a parallel to Course 41-42.

This course is designed to teach the student the important methods of preparation of organic compounds.

[105-106—Inorganic Chemistry, Advanced Course. Miss KELLER. 3 lectures and a minimum of 6 hours of laboratory work. 12 points.

Laboratory fee, \$20.00.

Prerequisite: Courses 5-6, 63, 64, and Physics 1-2 or 11-12.

This course is designed to supplement Courses 63 and 64. The lectures are devoted to a detailed discussion of the elements, and advanced theoretical chemistry. The laboratory work consists of practice in mineral analyses and physical-chemical measurements.

Not given in 1915-16.]

145-146—Organic Chemistry, Advanced Course. Professor REIMER. 3 lectures and a minimum of 6 hours of laboratory work. 12 points. M., W., and F. at 1.

Laboratory fee, \$20.00.

Prerequisite: Courses 5-6, 41-42, 43-44, 63, 64.

This course is designed to supplement Courses 41-42 and 43-44. It is a more comprehensive discussion of the most important classes of organic compounds, their structure and the mechanism of their reactions. Especial attention is given to those problems of theoretical organic chemistry which are being discussed at the present time. The laboratory work consists of the study and identification of organic compounds discussed in the lectures. In the second half-year, some special problem is assigned to each student.

Journal Club. 1 hour. The advanced students and the instructors meet for reports and discussion on recent scientific papers.

CLASSICAL PHILOLOGY

Greek

1-2—Elementary Course. Grammar, Composition, Xenophon's Anabasis. Professor HIRST. 6 points.

M., W., and F. at 2.

Prerequisite: Elementary Entrance Latin.

This course may not be begun in the second half-year.

3—Homer's Iliad. Professor STURTEVANT. 3 points.

M., W., and F. at 2.

Prerequisite: Course 1-2, or equivalent credit in Elementary Entrance Greek.

5—Homer: Odyssey; and Lucian: Selections. Professor YOUNG. 3 points.

M., W., and F. at 10.

Prerequisite: Courses 1-2 and 3 or Elementary Entrance Greek.

Prescribed for freshmen taking the A.B. course, unless they offered Advanced Latin at entrance or take Latin A in college.

6—Lucian: Selections; and Plato: Apology. Professor PERRY. 3 points.

M., W., and F. at 10.

Prerequisite: Courses 1-2 and 3 or Elementary Entrance Greek.

Prescribed for freshmen taking the A.B. course, unless they offered Advanced Latin at entrance or take Latin A in college.

9-10—Prose Composition. First Course. Mr. MESSER. 2 points.
Tu. at 11.

May be taken in connection with any other course (except Courses 1-2), but not separately.

11—Euripides: Iphigenia in Tauris; and Sophocles. Professor VAN HOOK. 3 points.

M., W., and F. at 11.

Prerequisite: Advanced Entrance Greek or Courses 5, 6.

12—Greek Oratory. Professor YOUNG. 3 points.

M., W., and F. at 11.

Prerequisite: Advanced Entrance Greek or Courses 5, 6.

13—Herodotus: Selections. 2 points. Professor HIRST.

Tu., and Th. at 10.

Prerequisite: Advanced Entrance Greek or Courses 5, 6.

14—Tragedy. Professor VAN HOOK. 2 points.

Tu., and Th. at 10.

Prerequisite: Advanced Entrance Greek or Courses 5, 6.

Courses 13, 14, and 15, 16 are given in alternate years.

[15—Lucian and Xenophon, or Herodotus. 2 points.

Not given in 1915-16.]

[16—Plato: Phædo. 2 points.

Not given in 1915-16.]

29-30—Prose Composition. Second Course. Professor WHEELER. 4 points.

Hour to be arranged.

Prerequisite: Course 9-10.

May be taken in connection with any other course, but not separately.

31—Æschylus: Prometheus Bound; Aristophanes: Frogs. 3 points.
Professor VAN HOOK.

M., W., and F. at 2.

Prerequisite Courses 11, 12, or 13, 14, or 15, 16.

32—Thucydides. Professor YOUNG. 3 points.

M., W., and F. at 2.

Prerequisite: Courses 11, 12, or 13, 14, or 15, 16.

Courses 31, 32 and 41, 42 are given in alternate years.

39-40—Prose Composition. Third Course. Dr. GUERNSEY. 4 points.

Hour to be arranged.

Prerequisite: Course 29-30.

May be taken in connection with any other course, but not separately.

[41, 42—Greek Literature; lectures and required reading. 8 points.

Not given in 1915-16.]

See also Classical Civilization 52, a course on Greek Life, and History 73, a course on Greek and Roman Theories of Life and Conduct.

Latin

Course A1, A2 or Course A3, A4 is prescribed for freshmen taking the A.B. course unless they offered Advanced Latin at entrance or take Greek 5, 6 in college. Course A3, A4 will be restricted to 20 students and is open only to those who have good entrance records. Prerequisite to the A courses: Elementary Entrance Latin

A1—Livy: Selections from Book I; Terence (one play). Professors KNAPP, VAN HOOK and HIRST, Mr. CRAWFORD, and Miss GOODALE. 3 points.

Sections I-III, M., W., and F. at 1; Sections IV-VI, Tu., Th., and S. at 9.

During the second half-year this course will be repeated as Latin A6 on M., W., and F. at 2, for students who enter in February.

A2—Horace: Selected Odes and Epodes; Catullus. Professors KNAPP, VAN HOOK, and HIRST, Mr. MESSER, Mr. DEBATIN, and Miss GOODALE. 3 points.

Sections I-III, M., W., and F. at 1; Sections IV-VI, Tu., Th., and S. at 9.

A3, A4—Selections from Latin Literature, representing characteristic aspects of Roman life and thought. Mr. MESSER. 6 points.

M., W., and F. at 1.

A6—See under A1, above.

9-10—Prose Composition. First Course. Miss GOODALE. 2 points. Hour to be arranged.

Prerequisite: a grade of at least 50% in Advanced Prose Composition at entrance.

May be taken in connection with any other course, but not separately.

11—Horace: Satires and Epistles. Mr. MESSER. 3 points. M., W., and F. at 9.

Prerequisite: Advanced Entrance Latin or Courses A1, A2 or A3, A4.

12—Juvenal; Martial; Pliny: Letters. Professor HIRST. 3 points. M., W., and F. at 9.

Prerequisite: Advanced Entrance Latin or Courses A1, A2 or A3, A4.

15—Cicero: Selected Letters. Mr. MESSER. 2 points. Tu. and Th. at 1.

Prerequisite: Advanced Entrance Latin or Courses A1, A2 or A3, A4.

16—Tacitus: Selections from Annales, Books XIV-XVI. Professor HIRST. 2 points.

Tu. and Th. at 1.

Prerequisite: Advanced Entrance Latin or Courses A1, A2, or A3, A4. Courses 15, 16 and 17, 18 are given in alternate years.

[17—Suetonius and Petronius. 2 points.
Not given in 1915-16.]

[18—Vergil or Lyric Poetry. 2 points.
Not given in 1915-16.]

29-30—Prose Composition. Second Course. Professor HIRST. 2 points.

Hour to be arranged.

Prerequisite: Course 9-10.

May be taken in connection with any other course, but not separately.

31—Roman Philosophy: Selections from Lucretius. Professor KNAPP. 3 points.

M., W., and F. at 2.

Prerequisite: Courses 11, 12 or 15, 16 or 17, 18.

32—Roman Drama: Selected plays of Plautus, Terence, and Seneca. Mr. MESSER. 3 points.

M., W., and F. at 2.

Prerequisite: Courses 11, 12 or 15, 16 or 17, 18.

39-40—Prose Composition. Third Course. Mr. MESSER. 4 points.
Hour to be arranged.

Prerequisite: Course 29-30.

May be taken in connection with any other course, but not separately.

41, 42—Latin Literature; lectures and reading. Professor KNAPP. 8 points.

Tu. and Th. at 3 and a third hour to be arranged. (All three hours will be arranged, if necessary.)

Prerequisite: Courses 11, 12 or 15, 16 or 17, 18.

See also History 73, a course on Greek and Roman Theories of Life and Conduct.

Classical Civilization

[51—Roman Life and Thought. 2 points.
Not given in 1915-16.]

52—Greek Life and Thought. Professor VAN HOOK. 2 points.

Tu. and Th. at 2.

Open to all students.

Courses 52 and 54 are given in alternate years.

[54—Greek Art. 2 points.
Not given in 1915-16.]

See also History 73, a course on Greek and Roman Theories of Life and Conduct.

ECONOMICS AND SOCIAL SCIENCE

Economics

A1-A2—Outlines of Economics. Professors MUSSEY and CHADDOCK, and Miss HUTCHINSON. 6 points.

Entire class Monday at 3; Section I, M. and W. at 10; Sections II and VI, Tu. and Th. at 9; Sections III and IV, Tu. and Th. at 10; Section V, Tu. and Th. at 11.

Prescribed for juniors and open to specially qualified sophomores.

11-12—Women in Gainful Occupations. Miss HUTCHINSON. 6 points.
M., W., and F. at 10.

Prerequisite: Course A1-A2.

A study of the economic and social relations of women.

***106—The Trust and Corporation Problem.** MR. ———. 2 points.
Tu. and Th. at 11.

Prerequisite: Course A1-A2.

111, 112—Problems of Public Health—Standards of Living. Professor CHADDOCK. 4 points.

Tu. and Th. at 10.

Prerequisite: Course A1-A2.

This course emphasizes the importance of the conservation of human energy and powers, especially in relation to the problems of the city community.

115—History of Socialism. Professor SIMKHOVITCH. 2 points.
Tu. and Th. at 11.

Open to juniors and seniors.

116—Socialism and the Social Movement. Professor SIMKHOVITCH.
2 points.

Tu. and Th. at 11.

Open to juniors and seniors.

117—The Labor Problem. Professor SEAGER. 2 points.

Tu. and Th. at 1.

Prerequisite: Course A1-A2.

Courses 101-102, Science of Finance, Professor SELIGMAN; 104, Commerce and Commercial Policy, Professor MUSSEY; 107, Fiscal and Industrial History of the United States, Professor SELIGMAN; 108, Railroad Problems; Economic, Social, and Legal, Professor SELIGMAN; 119, Economic History, Professor SIMKHOVITCH, given at Columbia University, are open, with the consent of the Department of Economics and the Committee on Instruction, to specially qualified seniors and juniors. For fuller information students are referred to the Announcement of the Division of History, Economics, and Public Law.

Sociology

Courses 151, 152, Principles of Sociology, Professors GIDDINGS and TENNEY, given at Columbia University, are open, with the consent of the instructor and the approval of the Department of Economics at Barnard College, to specially qualified seniors and juniors. For fuller information students are referred to the Announcement of the Division of History, Economics, and Public Law.

EDUCATION

Education A is prerequisite to all other courses in Education. Education B should be taken parallel with other courses in the senior year.

†A—Educational Psychology. Professor WHITLEY. 3 points.

Second half-year only, sections as follows:

Section II, M., W., and F. at 10; Section III, Tu., Th., and S. at 10;
Section IV, M., W., and F. at 9.

Prerequisite: Philosophy A1 or A4.

Students who have previously had a satisfactory course in educational psychology may substitute Course 255-256 for Course A. (See Announcement of School of Education.)

†B—History and Principles of Education. Professor GOODSSELL. 6 points.

Section I, M., W., and F. at 3; Section II, Tu., Th., and S. at 10.

Students who have a satisfactory knowledge of the field covered by Education B may substitute Course 243-244 for Course B.

†183, 184—Educational Hygiene. Professor WOOD. 6 points.

M., W., and F. at 2.

Courses 243-244, Philosophy of Education, Professor MACVANNEL; 251-252, Psychology of Childhood, Professor WHITLEY; 291-292, Educational Sociology, Professor SUZZALLO; 26a Applications of Analytic and Genetic Psychology to Education, Professor NORSWORTHY; 187-188, Hygiene of Childhood and Adolescence, Professor WOOD, are open, by permission of Teachers College and with the approval of the Committee on Instruction of Barnard College, to specially qualified seniors. For further information students are referred to the Announcement of the School of Education of Teachers College.

ENGLISH

A1-A2—Composition. Professor BALDWIN, Miss WEEKS, Mr. HALLER, Dr. HOWARD, Miss STURTEVANT, Miss M. W. LATHAM, and ——. 6 points.

Oral and written exposition and argument; description and narrative.

Students may tentatively select one of the following sections, but the Department reserves the right to make any changes necessary. Sections I and VII, Tu., Th., and S. at 9; Sections II and IV, Tu., Th., and S. at 10; Sections III, and V, Tu., Th., and S. at 11; Section VI, M., W., and F. at 11; Sections VIII and IX, M., W., and F. at 10.

Prescribed for freshmen and prerequisite for any other course.

A4, A5—Composition. Mr. HALLER and Miss M. W. LATHAM. 6 points.

A4, the equivalent of A1, is prescribed for students entering college in February; and A5, the equivalent of A2, is prescribed for these students in the first term of sophomore year.

M., W., and F. at 2.

(A second section of A4, A5 will be provided, at need, Tu. and Th. at 2 and S. at 11.)

B—English Literature. The prescription of six additional points of English (12 points in all) may be met by any one of the following B courses, the particular course being determined partly by the student's choice, partly by the proficiency or aptitude shown in Course A1-A2. In special cases students are permitted to substitute for a B course one of the numbered elective courses. In general, students who as juniors or seniors elect courses in addition to the twelve points prescribed are expected, and candidates for honors are required, so to distribute their choices as to study both the earlier literature and the later. To facilitate this, the B courses are so arranged as to cover the ground of some of the numbered elective courses. Students may thus, according to their needs, make either a more general or a more detailed study of a given period.

Every election must have the written approval of the department.

Prerequisite: Course A1-A2.

B1, B2—Epic and Romance. The development of narrative literature, especially in its earlier forms: selections from mediæval epic (in translation) and romance; English ballads; Chaucer's *Troilus and Criseyde* and five of the *Canterbury Tales* with the prologues and interludes; general survey of typical later forms. Miss STURTEVANT. 6 points.

Section I, M., W., and F. at 1; Section II, at 9.

B3, B4—Essay and Poetry. Essayists of the eighteenth and early nineteenth centuries; Burns, Wordsworth, Byron, Shelley, Scott and prose-writers. Mr. HALLER and ———. 6 points.

Section I, Tu., Th., and S. at 9; Section II, at 11.

B5, B6—Survey of English Literature. A rapid survey of the masterpieces of English literature since the Renaissance, especially in poetry and drama. Miss M. W. LATHAM. 6 points.

M., W., and F. at 9.

This course is designed (1) for students intending to transfer to the *School of Journalism*, and (2) for a limited number of students who do not intend to take any of the numbered elective courses.

B7, B8—Composition. Short themes, story-writing, essay-writing, collateral reading. Miss STURTEVANT. 6 points.

Tu., Th. at 10, and a third hour to be arranged.

Except in special cases, B7 is prerequisite to B8.

B9, B10—Journalistic Writing. Regular practice in writing on assignments. Dr. HOWARD. 6 points.

Tu., Th., and S. at 9.

Prescribed for *sophomores intending to transfer to the School of Journalism*, and equivalent to Journalism A1, A2; not open to other students.

B11, B12—Drama. The development of English drama, with especial study of the Elizabethan period. Dr. HOWARD and Miss M. W. LATHAM.

Section I, Tu., Th., and S. at 10; Section II, M., W., and F. at 1.

1, 2—Composition. Professor BREWSTER. 6 points.

Tu. and Th. at 10 and a third hour to be arranged.

Prerequisite: a B course. Except in special cases, Course 1 is prerequisite to Course 2.

Daily themes (first half-year) and weekly and fortnightly themes (second half-year).

4—Composition. Professor BALDWIN. 3 points.

Two consecutive hours, to be arranged, and a third appointment for criticism.

This special course in story-writing or play-writing, with collateral reading, is open to a limited number of seniors. Applications should be made two weeks before the date for handing in elections.

7-8—Elocution. Professor TASSIN. 4 points.

M., W., and F. at 1.

(A separate section for the study of public speaking may be arranged within this course for a sufficient number of well prepared students.)

Prerequisite: Course A1-A2.

19, 20—Survey of American Literature. Professor BAKER. 4 points.

Tu. and Th. at 1.

Prescribed for *sophomores intending to transfer to the School of Journalism*, except those who are advised to substitute a language course. Prerequisite for other students, a B course.

23, 24—English Victorian Literature. Dr. HOWARD. 6 points.

M., W., and F. at 11.

Prerequisite: a B course. Except in special cases, Course 23 is prerequisite to Course 24.

25—English Poetry from 1550 to 1625. Professor TRENT. 3 points.

M. and W. at 10.

Prerequisite: except in special cases, a B course.

[26—English Poetry from 1625 to 1674. 3 points.

Not given in 1915-16.]

27—English Poetry from Dryden to Wordsworth. Professor TRENT. 3 points.

M. and W. at 11.

Prerequisite: except in special cases, a B course.

[28—English Poetry from Wordsworth to 1830. 3 points.

Not given in 1915-16.]

29-30—Old and Middle English. Readings in representative texts to the time of Chaucer, accompanied by an historical survey of the development of the English language from old English to modern times. Professor KRAPP. 4 points.

Tu. and Th. at 10.

Prerequisite: except in special cases, a B course.

31—Chaucer. The language and poetry of Chaucer; linguistic and literary development in the fifteenth century. Professor BALDWIN. 3 points.
M., W., and F. at 9.

Prerequisite: except in special cases, a B course.

32—A Survey of Romances and Ballads, and other important forms of mediæval literature in England and on the continent. Professor GILDER-SLEEVE. 3 points.

M., W., and F. at 9.

Prerequisite: except in special cases, Course 31.

34—Dr. Johnson and his Circle. Literary and historical study of Johnson, Burke, Reynolds, Garrick, Goldsmith, and others. Mr. HALLER. 3 points.

M., W., and F. at 11.

Prerequisite: except in special cases, a B course.

35, 36—Shakspeare. Professor WRIGHT. 6 points.

M., W., and F. at 10.

Prerequisite: except in special cases, a B course.

37, 38—English Prose, including Fiction. Professor BREWSTER. 6 points.

Tu. and Th. at 2.

Prerequisite: except in special cases, a B course.

[41-42—English Drama exclusive of Shakspeare. 6 points.

Not given in 1915-16.]

[45-46—English Literary Criticism. 6 points.

Not given in 1915-16.]

FINE ARTS AND ARCHITECTURE

Fine Arts

[*101, 102—History of Art; Ancient and Medieval. Professor HAMLIN. 4 points.

Open to qualified juniors and seniors approved by the Committee on Instruction.

Not given in 1915-16; will be offered in 1916-17.]

Courses 101, 102 and 103, 104 are given in alternate years.

***103, 104—History of Art; Renaissance and Modern.** Professor HAMLIN. 4 points.

Tu. and Th. at 3.

Open to qualified juniors and seniors approved by the Committee on Instruction; may not be counted towards a degree by students who have credit for Course 69-70.

Architecture

For fuller information students are referred to the Announcement of the School of Architecture.

***21, 22—Ancient and Medieval Architecture.** Professor HAMLIN. 4 points.

M. and W. at 10.

Prerequisite: Fine Arts 101, 102.

***21a—Historic Research: Ancient and Medieval Architecture.** Professor HAMLIN and Curator BACH. The equivalent of 4 hours' research weekly. 3 points.

Hour to be arranged.

Prerequisite or parallel: Course 21, 22.

***23, 24—Renaissance, Modern and Oriental Architecture.** Professor HAMLIN. 4 points.

Tu. and Th. at 9.

Prerequisite: Fine Arts 101, 102.

***24a—Historic Research: Renaissance, Modern and Oriental.** Professor HAMLIN and Curator BACH. The equivalent of 4 hours' research weekly. 3 points.

Hour to be arranged.

Prerequisite or parallel: Course 23, 24.

***31, 32—Ancient Ornament.** Curator BACH. 4 points.

F. at 10.

Prerequisite: the student should consult the instructor before registration.

***33, 34—Medieval Ornament.** Professor HAMLIN. 4 points.

Th. at 11.

Prerequisite: the student should consult the instructor before registration.

***35, 36—Modern Ornament.** Professor HAMLIN. 4 points.

F. at 10.

Prerequisite: the student should consult the instructor before registration.

***41, 42—Theory and Processes of Decorative Arts.** Curator BACH. 4 points.

Th. at 10.

Open to all students.

***91, 92—History of Painting.** Curator BACH. 4 points.

Tu. at 10.

Open to all students.

[*93, 94—History of Sculpture. Curator BACH. 4 points.

Not given in 1915-16; will be offered in 1916-17.]

French. See Romance Languages and Literatures.

GEOLOGY¹

1, 2—General Geology. Elementary course. The time-honored subjects of physical, structural, dynamical, stratigraphical, and historical geology are treated as parts of a single subject, from the point of view, first of processes and their results, later of the history of the earth. Professor OGILVIE, Mrs. MOOK, and Miss HATCH. 2 lectures, 4 hours of laboratory work. 8 points.

Tu. and Th. at 9. Laboratory and field work, hours to be arranged.

Students who have had no previous scientific training will meet for occasional conferences and discussions at some hour to be arranged.

5-6—Economic Geology. A study of the formation, distribution, uses, and of the problems of conservation of ore deposits, coal, and other mineral resources. Professor OGILVIE and Miss HATCH. 4 points.

W. and F. at 11.

Prerequisite: Course 1, 2.

17, 18—Glacial Geology and Physiography. One lecture weekly on the past glacial periods, their causes and their after-effects. Professor OGILVIE. 2 points.

F. at 10.

Prerequisite or parallel: Course 1, 2.

19—Physiographic Geology. Professor OGILVIE and Miss HATCH. 1 lecture and 2 hours of laboratory work. 2 points, if taken with or subsequent to Course 1; if taken without Course 1, some of the laboratory work of Course 1 must be taken with Course 19 which will then count as 3 points.

M. at 10. Laboratory hours to be arranged.

If Course 19 is followed by either Course 2 or Course 20 it will constitute a full year of science.

20—Historical Geology. History of the earth considered in greater detail than in Course 2. Professor OGILVIE and Mrs. MOOK. 2 points if taken subsequent to Course 2; 3 points, if substituted for Course 2 and taken in combination with the regular field and laboratory work in Course 2.

Hours to be arranged.

21, 22—Palæontology. A systematic study of the development of life. Professor OGILVIE and Mrs. MOOK. 4, 6, or 8 points.

Hours to be arranged.

23, 24—Local Geology of New York. Field work in autumn and spring; laboratory work and lectures on local topics in winter. Professor OGILVIE. 2 points.

¹ In the reckoning of points for major and minor subjects, geology and mineralogy may be counted as one subject.

S., field work for the whole or half day, Oct., Nov., April, and May; in other months, laboratory or lecture, S. at 10.

This course may be taken in connection with any other course in geology.

113—Summer Field Course. Professor OGILVIE. 2 weeks in the field involving the subsequent preparation of a report. 4 points.

Time to be arranged.

Prerequisite: Course 1, 2.

117, 118—Glacial Geology and Advanced Physiography. Professor OGILVIE. Lectures, reading, field and laboratory work.

Work will be arranged to suit the needs of the students and credit will be given according to the amount accomplished.

Prerequisite: Course 1, 2; prerequisite or parallel: Course 17, 18.

123, 124—Field and laboratory work of Course 23, 24, with additional study of assigned topics. Professor OGILVIE.

Credit will be given according to the amount of work accomplished.

Hours to be arranged.

Open to advanced students only.

125, 126—General Geology. Advanced Course. A study of the igneous and the metamorphic rocks together with a consideration of the fundamental problems and causes of vulcanism and of diastrophism. Professor OGILVIE.

Work will be arranged to suit the needs of the students and credit will be given according to the amount accomplished.

Prerequisite: Course 1, 2.

Journal Club—The advanced students and instructors in Columbia University meet one evening fortnightly for the discussion of current papers and problems. The meetings of the Journal Club are open to Barnard students taking courses in geology.

Course 116, Index Fossils of North America, Professor GRABAU; 119 and 121, Physiographic Geology, Professor JOHNSON; 151, 152, Principles of Geology, Professors GRABAU and BERKEY, are open, with the consent of the Department of Geology and the Committee on Instruction, to properly qualified juniors and seniors. For fuller information students are referred to the Announcement of the Division of Geology, Geography, and Mineralogy.

GERMANIC LANGUAGES AND LITERATURES

Under the new requirements in Modern Languages (see p. 58) no German courses are now prescribed and none can therefore automatically excuse the student from the required departmental test. Courses 1-2 and 3, 4, or 5, 6, or 7, 8, are however, designed to give the proficiency required.

1-2 (old number A1-A2)—Beginners' Course. Elements of grammar, easy reading, written and oral practice. Drs. PORTERFIELD, HASKELL, and BETZ. 6 points.

Section I, M., W., and F. at 10; Section II, at 11; Section III, at 2.

3, 4 (old number 1-2)—Intermediate Course. Rapid reading and syntactical review. Drs. HASKELL and BETZ. 6 points.

Section I, M., W., and F. at 10; Section II, at 1.

Prerequisite to Course 3: Course 1-2, Elementary Entrance German or its equivalent.

Prerequisite to Course 4: Course 3, Intermediate Entrance German or its equivalent.

3a, 4a (old number 3-4)—Composition and Colloquial Practice. Elementary Course. Drill in German syntax and idiom. Dr. BETZ. 4 points.

Section I, Tu. and Th. at 9; Section II, at 11.

Prerequisite: Course 1-2, or Elementary Entrance German. This course may be elected only in combination with Courses 3, 4, 5, 6, or 7, 8.

5, 6—Selected Dramas of Lessing, Goethe, and Schiller. Texts and essays. Professor BRAUN, Drs. PORTERFIELD and BETZ. 6 points.

Section I, M., W., and F. at 9; Section II, at 11; Section III, at 1.

Prerequisite to Course 5: Course 3, 4, or, with the consent of the department, Intermediate Entrance German.

Prerequisite to Course 6: Course 5.

7, 8—Modern German Prose. Rapid reading of selections from the prose writings of Lessing, Goethe, Schiller, and of modern German historians, essayists, and critics. Dr. PORTERFIELD. 6 points.

M., W., and F. at 9.

Prerequisite: Course 3, 4, or, with the consent of the department, Intermediate Entrance German.

9, 10—Intermediate Practice Course. Conversation and themes on German life, literature, and current events, all in German. Professor BRAUN. 4 or 6 points (see note below.)

Tu. and Th. at 10, and F. at 9.

Prerequisite: Course 3a, 4a, or 5, 6, or 7, 8.

Except by special permission, Course 9, 10 may be elected *as a two-hour course* only in combination with another German course more advanced than Course 3a, 4a. *All students specializing in German should take it as a three-hour course.*

11, 12—Colloquial Practice. Advanced Course. Informal meetings with the instructor for German conversation, and the discussion of linguistic and literary topics in German. Dr. HASKELL. 2 points for the year, if taken in connection with another advanced German elective; if taken separately, no credit.

M. and W. at 1.

A fair degree of proficiency is regarded as a prerequisite, but students must apply in person to the instructor for permission to register in this course, as the class will be limited in membership.

[21, 22—Goethe. Life and Selected Works. Texts, reports, and lectures. Dr. HASKELL. 6 points.

Not given in 1915-16.]

Courses 21, 22, and 23, 24 are given in alternate years.

23, 24—Schiller. Life and Selected Works. Texts, reports, and lectures. Dr. HASKELL. 6 points.

M., W., and F. at 11.

The first term is open to qualified students who have taken Course 5, 6 or 7, 8; the second term, except by special permission of the instructor, is open only to those who have passed the first term satisfactorily.

25, 26—Selected Dramas of the Nineteenth Century. Texts of representative dramatists, such as Kleist, Grillparzer, Hebbel, Ludwig, Sudermann, Hauptmann; reports and essays. Professor BRAUN. 4 points.]

Tu. and Th. at 9.

Prerequisite to Course 25: Course 5, 6.

Prerequisite to Course 26: Course 25.

27, 28—Romantic Fiction and Poetry. Representative selections of epic prose and lyric poetry of various Romantic writers. Reading and lectures, discussions and reports. Dr. PORTERFIELD. 6 points.

M., W., and F. at 10.

Prerequisite to Course 27: Course 5, 6.

Prerequisite to Course 28: Course 27.

37, 38—History of German Literature from the earliest times to the nineteenth century. Lectures, themes, and readings from Thomas's *Anthology of German Literature* and other texts. Professor BRAUN. 4 points.

M. and W. at 9.

The first term is open to juniors and seniors who have taken Course 5, 6 or 7, 8; the second term, except by special permission of the instructor, is open only to those who have passed the first term satisfactorily.

39, 40—Goethe's Faust; First and Second Parts. Lectures and recitations. Professor THOMAS. 4 points.

Tu. and Th. at 10.

The first term is open to juniors and seniors who have taken Course 5, 6 or 7, 8; the second term, except by special permission of the instructor, is open only to those who have passed the first term satisfactorily.

Courses 105, German Literature from 1796 to 1871, Professor THOMAS; 106, Contemporary German Literature, Dr. BÖHME; 107, History of the German Language, Professor REMY; 108, The German of To-day, 109, Heinrich von Kleist, *Vorlesungen und Aufsätze in deutscher Sprache*, Professor HEUSER; 112, Myth and Legend in the Works of Richard Wagner, Professor REMY; 113-114, Middle High German Literature, Professor HERVEY, given at Columbia University, are open, with the consent of the Department of German and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Modern Languages and Literatures.

Greek. See Classical Philology.

HISTORY

A1-A2—Epochs of European History, with special reference to forms of government and changes in social conditions. Professor MUZZEY and Dr. HUTTMANN. 6 points.

Sections I and II, Tu., Th., and S. at 9; Sections III and IV, Tu., Th., and S. at 10.

Prescribed for sophomores and for *freshmen intending to transfer to the School of Journalism*. This course is prerequisite to all the courses enumerated below.

Students who pass the entrance examination in medieval and modern history may, with the permission of the Department of History, substitute for History A1-A2, as the prescribed work, one of the courses in history numbered less than 100, provided that the total number of points of credit attached to the course be not less than six.

[3-4—Greece and Early Italy. Professor BOTSFORD. 6 points.

Not given in 1915-16.]

Courses 3-4 and 5-6 are given in alternate years.

5-6—The Roman Empire. Professor BOTSFORD. 6 points.

M., W., and F. at 9.

9, 10—Modern European History with special reference to the development of France. Professor MUZZEY. 4 points.

Tu. and Th. at 1.

Prescribed for *sophomores intending to transfer to the School of Journalism*.

11, 12—English History, with special reference to the history of Continental Europe. Dr. HUTTMANN. 6 points.

Tu. and Th. at 1 and a third hour to be arranged.

13, 14—History of the United States to the Close of Reconstruction. Professor SHEPHERD. 4 points.

M. and W. at 11.

15-16—History of the United States since 1870 with special reference to economic and social conditions. Professor MUZZEY. 4 points.

Tu. and Th. at 2.

Prescribed for *sophomores intending to transfer to the School of Journalism*.

19, 20—Contemporary European History, based largely upon current news. Professor SHOTWELL and Miss MCKENZIE. 6 points.

M., W., and F. at 2.

Prerequisite: Course A1-A2.

Prescribed for *sophomores intending to transfer to the School of Journalism*.

73—Greek and Roman Theories of Life and Conduct. Mrs. PUTNAM. 2 points.

Tu. and Th. at 11.

Open to juniors and seniors. This course is specially recommended to students taking Course 121.

121, 122—The History of the Intellectual Class in Europe. Professor ROBINSON and Dr. HUTTMANN. 6 points.

Tu. and Th., 2-4.

Open only to seniors and to specially qualified juniors.

Prerequisite to Course 122: Course 121.

***155, 156—European Social History.** Professor SHOTWELL and Miss MCKENZIE. 6 points.

M., W., and F. at 3.

Open to seniors and to specially qualified juniors.

Courses 117, History of Greece to the End of the War with Persia, Professor BOTS-FORD; 169-170, The Expansion of Europe, Professor SHEPHERD, given at Columbia University, are open, with the consent of the Department of History and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of History, Economics, and Public Law.

Hygiene. See Education and Physical Education.

Italian. See Romance Languages and Literatures.

Latin. See Classical Philology.

MATHEMATICS

A1, A2—Trigonometry, Algebra, and Geometry. Trigonometry, including the use of tables, the solution of triangles, and the important analytical formulæ; algebra, including permutations and combinations, determinants and logarithms; graphical analysis, solid geometry. Dr. CURTIS, Dr. FISCHER, and Mr. MULLINS. 6 points.

Sections I and II, M., W., and F. at 9; Sections III and IV, M., W., and F. at 10; Section V, M., W., and F. at 11; Section VI, M., W., and F. at 2; Sections VII, Tu., Th., and S. at 9.

Mathematics A1, A2 (except such parts—trigonometry, algebra, or solid geometry—as were passed for entrance) is prescribed for all freshmen.

During the second half-year, the work of the first term will be repeated as Mathematics A4, on Tu., Th., and S. at 10, for students who enter in February.

21—Analytical Geometry. Introduction to the analytical geometry of the plane and of space. Dr. CURTIS. 3 points.

M., W., and F. at 11.

Prerequisite: Course A1, A2, or Advanced Entrance Mathematics.

22—Calculus. Elementary course in the differential and integral calculus. Professor KASNER. 3 points.

M., W., and F. at 11.

Prerequisite: Course 21.

23-24—Theory of Equations. Algebraic and numerical solution of equations, determinants, complex numbers. Dr. CURTIS. 6 points.

M., W., and F. at 2.

Prerequisite: Course A1, A2.

25-26—Calculus. Differential and integral calculus. Professors KASNER and COLE. 6 points.

M., W., and F. at 11.

Prerequisite: Course 22.

27-28—Projective Geometry. Projective methods of pure geometry. Mr. MULLINS. 6 points.

M., W., and F. at 1.

Prerequisite: Course 21.

[32—Advanced Analytical Geometry. Modern methods in analytical geometry; solid analytical geometry. Dr. CURTIS. 3 points.

Prerequisite: Course 25-26.

Not given in 1915-16.]

[33-34—The Fundamental Concepts of Modern Mathematics. Lectures, discussions, and reports. Professor KASNER. 6 points.

Prerequisite or parallel: Course 25-26.

Not given in 1915-16.]

35-36—General Introduction to Higher Mathematics. Professor KASNER. 3 points.

M., W., and F. at 10.

Prerequisite or parallel: Course 25-26.

†151, 152—History of Mathematics. Professor D. E. SMITH. 8 points.
M. and W., 4-5.30.

MINERALOGY¹

17-18—General Mineralogy. Professor OGILVIE and assistant. 1 lecture and 2 or 4 hours of laboratory work. 4 or 6 points.

Hours to be arranged.

Prerequisite: some knowledge of chemistry.

Laboratory fee, \$3.

MUSIC

***1-2—General Musical Course.** History of Music from Palestrina to the death of Beethoven, with illustrations. Professor MASON. 4 points.
M. and W. at 2.

This course requires no previous knowledge of music.

***3-4—General Musical Course, Advanced.** Discussion of modern music. Professor MASON. 4 points.

Tu. and Th. at 11.

Prerequisite: Course 1-2. Students who have not taken Course 1-2 will be admitted, but will be required to take a special examination during the first few weeks showing a general knowledge of the chief contributions

¹In the reckoning of points for major or minor subjects, mineralogy and geology may be counted as one subject.

to music of the classic masters—Bach, Haydn, Mozart, Beethoven. Such a knowledge may be obtained by reading Surette and Mason's *The Appreciation of Music*.

*7, 8—Harmony. Mr. WARD. 6 points.

M., W., and F. at 11.

Prerequisite: a knowledge of musical notation.

*9-10—Advanced Harmony and Elementary Form. Professor MASON. 4 points.

M. and W. at 3.

Prerequisite: Course 7, 8.

*11, 12—Counterpoint. Mr. WARD. 4 points.

Tu. and Th. at 2.

Prerequisite: Course 7, 8.

*13-14—Composition and Orchestration. Professor RUBNER. 4 points.

Th., 10-12.

Prerequisite: Course 9-10.

Courses 101-102, Advanced Composition and Orchestration, and 103-104, Orchestration and Symphonic Form, Professor RUBNER, given at Columbia University, are open, with the consent of the Department of Music and the Committee on Instruction, to properly qualified seniors.

For fuller information regarding the various courses in music, students are referred to the appropriate University Announcement.

Old Irish. See Romance Languages and Literatures.

PHILOSOPHY AND PSYCHOLOGY

Philosophy

A1, A2—Introductory Course. Psychology and Logic. Professors MONTAGUE and HOLLINGWORTH, and Dr. COSTELLO. 6 points.

Philosophy A1 and A4 are identical psychology courses. Philosophy A2 and A3 are identical logic courses. Two half-year courses, one psychology (A1 or A4) and the other logic (A2 or A3) are prescribed for sophomores and may be taken in any combination desired. Specially qualified seniors and juniors may, with the consent of the Department of Philosophy, substitute Course 61 and Course 162 for Course A1, A2.

A1, A2, Section I, M., W., and F. at 9; Section II, at 11; Section III, Tu., Th., and S. at 10. A3, A4, Section IV, M., W., and F. at 10; Section V, at 11.

21-22—Ethics. Professors LORD and MONTAGUE. 8 points.

M., W., and F. at 1.

Prerequisite: Course A1, A2.

61—The History of Ancient Philosophy. Professor MONTAGUE. 4 points.

M., W., and F. at 9.

Prerequisite: Course **A1, A2**, except in special cases, where, with the consent of the Department of Philosophy, Course **61** and Course **162** are substituted for Course **A1, A2**.

***162—The History of Modern Philosophy.** Professor WOODBRIDGE. 4 points.

M., W., and F. at 9.

Prerequisite: Course **61**.

79-80—Contemporary Philosophy. Dr. COSTELLO. 6 points.

Tu. and Th. at 9.

Prerequisite: Course **A1, A2**.

Courses **107**, English Realism, Dr. COSTELLO; **108**, Logistic, Dr. COSTELLO; **123-124**, History of Ethics, Dr. COOLEY; **126**, Organic Conception of the State in Ancient and Modern Times, Professor ADLER; **131-132**, Moral and Political Philosophy, Professor DEWEY; **141**, Esthetics, Professor BUSH; **164**, Philosophy of Bergson, Professor MILLER; **175-176**, Scholasticism, Father CLIFFORD, given at Columbia University, are open, with the consent of the Department of Philosophy and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Philosophy, Psychology, and Anthropology.

Psychology

For the elementary course in Psychology, which is prerequisite to all other courses in this subject, see Philosophy **A1** or **A4**.

7-8—Experimental Psychology, Introductory Course. Professor HOLLINGWORTH. 2 lectures and 4 hours of laboratory work. 8 points.

W. and F. at 10; laboratory work M. at 10, and 3 hours M., W., or F. afternoon.

9, 10—Experimental Psychology, Intermediate Course. Professor HOLLINGWORTH. 1 hour conference and 4 hours of laboratory work. 6 points.

Conference M. at 9; laboratory work M., W., or F. afternoons.

Prerequisite: Course **7-8** or its equivalent.

11—Abnormal and Applied Psychology. Professor HOLLINGWORTH. 2 lectures, reading, reports, and visits to clinics and institutions. 3 points.

W. and F. at 9; other hours to be arranged.

Prerequisite: Course **7-8** or its equivalent.

12—Analytic Psychology. Professor HOLLINGWORTH. Lectures, reading, and discussion. 3 points.

W. and F. at 9.

Prerequisite: Course **7-8** or its equivalent.

Courses at Columbia University numbered over **100** in analytic, experimental, physiological, and genetic psychology are open to specially qualified seniors with the consent of the Department and of the Committee on Instruction. For details of these courses see the Announcement of the Division of Philosophy, Psychology, and Anthropology.

PHYSICAL EDUCATION

†A₁, A₂—Lectures on Personal Hygiene, Elementary Dancing, Games, and Athletics. Miss BEEGLE. 2 points.

Lecture (first half-year only), Section I, Tu. at 1; Section II, at 2; and gymnasium work in sections as follows:

Section I (elementary dancing), M. and W. at 3.

Section II (advanced dancing), Tu. and Th. at 11.

Section III (general athletics and swimming), Tu. and Th. at 3, M., 4.

Gymnasium fee, \$7.

Prescribed for freshmen unless Course D₁, D₂ is substituted by advice of the Director of Physical Education.

†B₁, B₂—Lectures on Physiology and Eugenics, Athletics, Games, and Dancing. Miss BEEGLE. 2 points.

Lecture hours to be arranged, and gymnasium work in sections as follows:

Section I (dancing), Tu. and Th. at 10.

Section II (dancing), Tu. and Th. at 11.

Section III (general athletics), M. or W. at 4 (and swimming), M. or W. at 3.30.

Gymnasium fee, \$7.

Prescribed for sophomores unless excused by the Director of Physical Education. Such sophomores as have completed Course D₁, D₂ and are excused from Course B₁, B₂ by the Director of Physical Education, are not required to take any further work in Physical Education.

†C₁, C₂—Advanced Folk and Interpretative Dancing. Miss BEEGLE. 2 hours.

Hours to be arranged after consultation with the instructor.

Gymnasium fee, \$7.

Open to juniors and seniors. This course cannot be counted for a degree.

D₁, D₂—Hygiene, Physiology, and Public Health Problems. Miss BEEGLE. 2 points.

Tu. at 2.

Prescribed as an alternative for freshmen who have been excused from Course A₁, A₂ by the Director of Physical Education.

See also Education 183, a course in Educational Hygiene.

NOTE—Indoor basket-ball, hockey, and base-ball practice in the gymnasium on M. at 5; Tu. at 4; and S. at 11. All students substituting athletics for Course A or B are required to register for one period of gymnasium work and two periods of practice.

An annual gymnasium fee of \$7 is required of every student in Barnard College. This entitles the student to a locker and the use of the gymnasium, swimming-pool, hand-ball courts, and bowling alleys at scheduled hours.

The prescribed gymnasium and field costume consists of dark blue bloomers, white sailor blouses, and ties of class color. Detailed information concerning the costume will be posted on the bulletin of the Physical Education office, Room 116, Barnard College.

For detailed description of other courses in Hygiene and Physical Education, offered by the Faculty of Teachers College and open to Barnard College students, see the Announcement of the School of Education of Teachers College or of the Division of Physical Education.

PHYSICS

1-2—Elementary Course in General Physics. Professor MALTBY and Miss BRANT. 5 hours, lectures, discussions, and laboratory work. 6 points.

M., W., and F. at 11.

This course is intended for students who have no previous knowledge of physics.

11-12—General Physics. Miss LANGFORD and Miss BRANT. 5 hours, lectures, discussions, and laboratory work. 6 points.

Tu. and Th. at 11, and a third hour to be arranged.

Prerequisite: Entrance Physics.

31—Mechanics. Miss LANGFORD. 3 hours, lectures and discussions, and 2 or 4 hours of laboratory work. 4 or 5 points.

Hours to be arranged.

Prerequisite: Course 1-2 or 11-12, except by special arrangement.

32—Heat and the Properties of Matter. Miss LANGFORD. 3 hours, lectures and discussions, and 2 or 4 hours of laboratory work. 4 or 5 points.

Hours to be arranged.

Prerequisite: Course 31, except by special arrangement.

33—Sound. Professor MALTBY. 3 hours, lectures and discussions, and 2 hours of laboratory work. 4 points.

Hours to be arranged.

Prerequisite: Course 1-2 or 11-12.

34—Light. Miss LANGFORD. 3 hours, lectures and discussions, and 2 hours of laboratory work. 4 points.

Hours to be arranged.

Prerequisite: Course 1-2 or 11-12.

35—Electricity and Magnetism. Miss LANGFORD. 4 or 5 points. Hours to be arranged.

Prerequisite: Courses 31 and 32.

36—Electricity. Miss LANGFORD. 4 points.

Hours to be arranged.

Prerequisite: Course 35.

138—Theory of Electricity. Professor MALTBY. 3 points.

Hours to be arranged.

Prerequisite: Courses 35, 36.

POLITICS

1, 2—American Government. First term: federal government; second term: state and municipal government. Professor BEARD and Mr. MACMAHON. 6 points.

M., W., and F. at 2.

Prescribed for *freshmen intending to transfer to the School of Journalism*.
Open to other students who have had History A.

Psychology. See Philosophy and Psychology.

RELIGION

1-2—Introduction to the Study of the Bible. A study of the books of the Bible, including their historical setting, literary form, and permanent principles. Chaplain KNOX. 4 points.

Tu. and Th. at 2.

Open to all students.

ROMANCE LANGUAGES AND LITERATURES

French

Under the new requirements in Modern Languages (see p. 58) no French courses are now prescribed and none can therefore automatically excuse the student from the regular departmental test. Students will, however, find no difficulty in selecting courses that will enable them to satisfy this test.

1, 2 (old number A1-A2)—Elementary Course. Professor MULLER and Mr. FORTIER. 6 points.

Section I, M., W., and F. at 9; Section II, at 10.

1a, 2a (old number 1, 2)—Reading, Composition, Syntax. Professor MULLER, Dr. ALEXANDER, and Mr. IMBERT. 6 points.

Sections I and II, M., W., and F. at 11, Section III, at 2.

Prerequisite to Course 1a; Course 1, 2, or Elementary Entrance French.

Prerequisite to Course 2a; Course 1a, or Intermediate Entrance French.

3, 4—General Introduction to the Study of French Literature. Reading, composition, and lectures. Professors GERIG, and MULLER, and Dr. ALEXANDER. 6 points.

Section I (for students who passed the examination in Intermediate Entrance French and who intend to continue the subject), M., W., and F. at 10; Section II, M., W., and F. at 10; Section III, at 9.

Prerequisite: Course 1a, 2a or its equivalent.

5, 6—History of French Literature in the Seventeenth Century. Professor WEEKS. 6 points.

M., W., and F. at 11.

Prerequisite: grade C in Course 3, 4.

7, 8—Modern French Writers. Practical course, conducted entirely in French. Professor JORDAN. 6 points.

M., W., and F. at 1.

Prerequisite: Course 3, 4, or the equivalent of Course 2, with special training in the practical use of the language.

9, 10—Advanced French Composition. Class work entirely in French. Professor JORDAN. 4 points.

Tu. and Th. at 11.

Prerequisite: Course 2.

17, 18—History of the French Drama. Professor WEEKS. 6 points.

M., W., and F. at 2.

Prerequisite: Course 5, 6.

Courses 103, 104, History of French Literature in the Eighteenth Century, Professor LOISEAUX; 105, 106, History of French Literature in the Nineteenth Century, Professor WEEKS. 111, 112, French Literature in the Sixteenth Century, Professor GERIG; 113, 114, Old French, Professor TODD, given at Columbia University, are open, with the consent of the Department of Romance Languages and Literatures and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Modern Languages and Literatures.

Italian

1, 2—General Introduction to the Italian Language and Literature. Grammar and easy Italian texts. Professors LIVINGSTON and BIGONGIARI. 6 points.

M., W., and F. at 1.

3, 4—Dante's Inferno, Petrarch's Canzoniere, Carducci. Italian Composition. Professors LIVINGSTON and BIGONGIARI. 6 points.

M., W., and F. at 2.

Course 131, 132, Typical Movements in Italian Literature, Professors LIVINGSTON and BIGONGIARI, given at Columbia University, is open, with the consent of the Department of Romance Languages and Literatures and the Committee on Instruction, to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Modern Languages and Literatures.

Spanish

1, 2—Elementary Course. Grammar, reading, composition. Professor LOISEAUX. 6 points.

M., W., and F. at 11.

This course may not be taken at the same time with Italian 1, 2.

3, 4—General Introduction to Spanish Literature. Grammar, reading, composition. Mr. IMBERT. 6 points.

M., W., and F. at 10.

Prerequisite: Course 1, 2.

Courses 143, 144, the Spanish Comedia, given at Columbia University, are open with the consent of the Department of Romance Languages and Literatures and the Committee on Instruction to properly qualified seniors. For fuller information students are referred to the Announcement of the Division of Modern Languages and Literatures.

Romance Philology

Courses 151, 152, Introduction to Romance Philology, Phonology (first half-year), Morphology (second half-year), Professor TODD, are open under the same conditions to properly qualified seniors.

Old Irish

1, 2—Elementary Course. Grammar and Elementary Texts. Professor GERIG. 2 points.

Th. at 2.

The course will include also lectures on general topics in Celtic literature. Books: Dottin, *Manuel d'irlandais moyen*; Strachan, *Stories from the Táin*; Pokorny, *Concise Grammar of Old Irish*.

Sociology. See Economics and Social Science.

Spanish. See Romance Languages.

ZOOLOGY

1-2—General Biology and General Zoölogy. Elementary course. Professors CRAMPTON and OSBURN, Miss DEDERER, Dr. GREGORY, and Mrs. LOWTHER. 2 lectures and 4 hours of laboratory work. 8 points.

Tu. and Th. at 1. Laboratory work, Tu. and Th., 2-4, or W. and F., 1-4.

Laboratory fee, \$5.00.

Open to sophomores, juniors, and seniors.

This course is especially designed for students of physiology, geology, and medicine, as well as for those who intend to pursue zoölogy and botany.

3—Histology. Miss DEDERER. 1 lecture and 2 hours of laboratory work. 2 points.

W. at 9; laboratory work, W., 10-12 preferably.

Laboratory fee, \$2.50, unless taken with Course 1.

Prerequisite or parallel: Course 1. Recommended as a parallel to Course 1.

4—Embryology. Professor OSBURN. 1 lecture and 2 hours of laboratory work. 2 points.

W. at 9; laboratory work, W., 10-12 preferably.

Laboratory fee, \$2.50, unless taken with Course 2 or Course 102.

Prerequisite or parallel: Course 1-2. Recommended as a parallel to Course 2.

[5—General Principles of Biology. A general discussion of the fundamental facts of variation, inheritance, evolution, geographical distribution, animal coloration, and related topics. Professor CRAMPTON. 2 points.

Prerequisite: Course 1-2.

This course supplements the general discussion given in Courses 1-2 and 101-102, and gives opportunity for a more critical and extended treatment of general principles.

Not given in 1915-16.]

[6—Experimental Biology. An introduction to the experimental study of growth, reaction to stimuli, development, inheritance, and related topics. Professor CRAMPTON. 2 points.

Prerequisite: Course 1-2.

This course gives opportunity to undergraduates to become familiar with some of the methods and results of experimental research, and forms a desirable preparation for graduate work in experimental subjects.

Not given in 1915-16.]

7-8—Biology and Vital Relations of the Human Organism. General anatomy and physiology of the human type in comparison with other organisms; the biological basis of individual hygiene; human genetics; social relations of human beings in the light of biology. Professors CRAMPTON and OSBURN and Dr. GREGORY. 4 points; or 2 points, if taken parallel with or subsequent to Course 1-2.

W. and F. at 2.

Open to students of all classes.

This course does not count as fulfilling the prescribed requirement in science for the A.B. or B.S. degree.

53, 54—Practical Zoölogy and Embryology. Miss DEDERER. 4 hours of conference and laboratory work. 4 points.

Hours to be arranged.

Laboratory fee, \$5.00.

Prerequisite: Course 1-2.

This course is designed for students of zoölogy desiring practice in the preparation and mounting of zoölogical, histological, and embryological materials for microscopic examination.

101, 102—General Zoölogy. Advanced course. Professors CRAMPTON and OSBURN, Miss DEDERER, and Dr. GREGORY. 3 lectures and 6 hours of laboratory work. 12 points.

M., W., and F., 9-12.

Laboratory fee, \$5.00.

Prerequisite: Courses 1-2, and 4.

This course is designed for students intending to enter medicine, also for students of zoölogy and botany as graduate subjects.

151-152—General Physiology. General principles of animal physiology. Professor OSBURN and Dr. GREGORY. 2 lectures and 4 hours of demonstration and laboratory work. 8 points.

Tu. and Th., 9-12.

Laboratory fee, \$5.00.

Open to juniors and seniors.

Prerequisite: Course 1-2 or its equivalent.

This course is designed for students of zoölogy, botany, and psychology, as well as for students intending to study medicine.

SCHEME OF

HOURS	MONDAY	TUESDAY	WEDNESDAY
A.M.	Botany 51-52 †Education A (IV) English B1, B2 (II) English B5, B6 English 31, 32 French 1, 2 (I) French 3, 4 (III) German 5, 6 (I) German 7, 8 German 37, 38 History 5-6 Latin 11, 12 Mathematics A1, A2 (I, II) Philosophy A1, A2 (I) Philosophy 61 *Philosophy 162 Psychology 9, 10 Zoölogy 101, 102	*Architecture 23, 24 Chemistry 41-42 Economics A1-A2 (II, VI) English A1-A2 (I, VII) English B3, B4 (I) English B9, B10 Geology 1, 2 German 3a, 4a (I) German 25, 26 History A1-A2 (I, II) Latin A1, A2 (IV, V, VI) Mathematics A1, A2 (VII) Philosophy 79-80 Zoölogy 151-152	Botany 51-52 †Education A (IV) English B1, B2 (II) English B5, B6 English 31, 32 French 1, 2 (I) French 3, 4 (III) German 5, 6 (I) German 7, 8 German 37, 38 History 5-6 Latin 11, 12 Mathematics A1, A2 (I, II) Philosophy A1, A2 (I) Philosophy 61 *Philosophy 162 Psychology 11, 12 Zoölogy 3, 4 Zoölogy 101, 102
9			
10	*Architecture 21, 22 Economics A1-A2 (I) Economics 11-12 †Education A (II) English A1-A2 (VIII, IX) English 25 English 35, 36 French 1, 2 (II) French 3, 4 (I, II) Geology 19 German 1-2 (I) German 3, 4 (I) German 27, 28 Greek 5, 6 Mathematics A1, A2 (III, IV) Mathematics 35-36 Philosophy A3, A4 (IV) Psychology 7-8 Spanish 3, 4 Zoölogy 101, 102	*Architecture 91, 92 Botany 53-54 Chemistry 63, 64 Economics A1-A2 (III, IV) Economics 111, 112 †Education A (III) †Education B (II) English A1-A2 (II, IV) English B7, B8 English B11, B12 (I) English 1, 2 English 29-30 German 9, 10 German 39, 40 Greek 13, 14 History A1-A2 (III, IV) Mathematics A4 Philosophy A1, A2 (III) Physical Education B1, B2 (I) Zoölogy 151-152	*Architecture 21, 22 Economics A1-A2 (I) Economics 11-12 †Education A (II) English A1-A2 (VIII, IX) English 25 English 35, 36 French 1, 2 (II) French 3, 4 (I, II) German 1-2 (I) German 3, 4 (I) German 27, 28 Greek 5, 6 Mathematics A1, A2 (III, IV) Mathematics 35-36 Philosophy A3, A4 (IV) Psychology 7-8 Spanish 3, 4 Zoölogy 101, 102
11	Chemistry 5-6 English A1-A2 (VI) English 23, 24 English 27 English 34 French 1a, 2a (I, II) French 5, 6 German 1-2 (II) German 5, 6 (II) German 23, 24 Greek 11, 12 History 13, 14 Mathematics A1, A2 (V) Mathematics 21, 22 Mathematics 25-26 *Music 7, 8 Philosophy A1, A2 (II) Philosophy A3, A4 (V) Physics 1-2 Spanish 1, 2 Zoölogy 101, 102	Botany 153, 154 Economics A1-A2 (V) *Economics 106 Economics 115, 116 English A1-A2 (III, V) English B3, B4 (II) French 9, 10 German 3a, 4a (II) Greek 9-10 History 73 *Music 3-4 Physical Education A1, A2 (II) Physical Education B1, B2 (II) Physics 11-12 Zoölogy 151-152	Chemistry 5-6 English A1-A2 (VI) English 23, 24 English 27 English 34 French 1a, 2a (I, II) French 5, 6 Geology 5-6 German 1-2 (II) German 5, 6 (II) German 23, 24 Greek 11, 12 History 13, 14 Mathematics A1, A2 (V) Mathematics 21, 22 Mathematics 25-26 *Music 7, 8 Philosophy A1, A2 (II) Philosophy A3, A4 (V) Physics 1-2 Spanish 1, 2 Zoölogy 101, 102

Courses marked with an asterisk [*] are given at Columbia University;

ATTENDANCE

THURSDAY	FRIDAY	SATURDAY
<p>*Architecture 23, 24 Chemistry 41-42 Economics A1-A2 (II, VI) English A1-A2 (I, VII) English B3, B4 (I) English B9, B10 Geology 1,2 German 3a, 4a (I) German 25, 26 History A1-A2 (I, II) Latin A1, A2 (IV, V, VI) Mathematics A1, A2 (VII) Philosophy 79-80 Zoölogy 151-152</p>	<p>Botany 51-52 †Education A (IV) English B1, B2 (II) English B5, B6 English 31, 32 French 1, 2 (I) French 3, 4 (III) German 5, 6 (I) German 7, 8 German 9, 10 History 5-6 Latin 11, 12 Mathematics A1, A2 (I, II) Philosophy A1, A2 (I) Philosophy 61 *Philosophy 162 Psychology 11, 12 Zoölogy 101, 102</p>	<p>English A1-A2 (I, VII) English B3, B4 (I) English B9, B10 History A1-A2 (I, II) Latin A1, A2 (IV, V, VI) Mathematics A1, A2 (VII)</p>
<p>*Architecture 41, 42 Botany 53-54 Chemistry 63, 64 Economics A1-A2 (III, IV) Economics 111, 112 †Education A (III) †Education B (II) English A1-A2 (II, IV) English B7, B8 English B11, B12 (I) English 1, 2 English 29-30 German 9, 10 German 39, 40 Greek 13, 14 History A1-A2 (III, IV) Mathematics A4 *Music 13-14 Philosophy A1, A2 (III) Physical Education B1, B2 (I) Zoölogy 151-152</p>	<p>*Architecture 31, 32 *Architecture 35, 36 Chemistry 63, 64 Economics 11-12 †Education A (II) English A1-A2 (VIII, IX) English 35, 36 French 1, 2 French 3, 4 (I, II) Geology 17, 18 German 1-2 (I) German 3, 4 (I) German 27, 28 Greek 5, 6 Mathematics A1, A2 (III, IV) Mathematics 35-36 Philosophy A3, A4 (IV) Psychology 7-8 Spanish 3, 4 Zoölogy 101, 102</p>	<p>†Education A (III) †Education B (II) English A1-A2 (II, IV) English B11, B12 (I) Geology 23, 24 History A1-A2 (III, IV) Mathematics A4 Philosophy A1, A2 (III)</p>
<p>*Architecture 33, 34 Botany 153, 154 Economics A1-A2 (V) *Economics 106 Economics 115, 116 English A1-A2 (III, V) English B3, B4 (II) French 9, 10 German 3a, 4a (II) History 73 *Music 3-4 *Music 13-14 Physical Education A1, A2 (II) Physical Education B1, B2 (II) Physics 11-12 Zoölogy 151-152</p>	<p>Chemistry 5-6 English A1-A2 (VI) English 23, 24 English 34 French 1a, 2a (I, II) French 5, 6 Geology 5-6 German 1-2 (II) German 5, 6 (II) German 23, 24 Greek 11, 12 Mathematics A1, A2 (V) Mathematics 21, 22 Mathematics 25-26 *Music 7, 8 Philosophy A1, A2 (II) Philosophy A3, A4 (V) Physics 1-2 Spanish 1, 2 Zoölogy 101, 102</p>	<p>English A1-A2 (III, V) English A4, A5 (II) English B3, B4 (II)</p>

those marked with a dagger [†] are given at Teachers College.

SCHEME OF

HOURS	MONDAY	TUESDAY	WEDNESDAY
P.M.	Anthropology 1, 2 Chemistry 145-146 English B1, B2 (I) English B11, B12 (II) English 7-8 French 7, 8 German 3, 4 (II) German 5, 6 (III) German 11, 12 Introductory Science 1-2 Italian 1, 2 Latin A1, A2 (I, II, III) Latin A3, A4 Mathematics 27-28 Philosophy 21-22	Astronomy 1, 2 Economics 117 English 19, 20 History 9, 10 History 11, 12 Latin 15, 16 Physical Education A1 (I) (Lecture) Zoology 1-2	Anthropology 1, 2 Chemistry 145-146 English B1, B2 (I) English B11, B12 (II) English 7-8 French 7, 8 German 3, 4 (II) German 5, 6 (III) German 11, 12 Introductory Science 1-2 Italian 1, 2 Latin A1, A2 (I, II, III) Latin A3, A4 Mathematics 27-28 Philosophy 21-22
1.10			
2.10	†Education 183, 184 English A4, A5 (I) French 1a, 2a (III) French 17, 18 German 1-2 (III) Greek 1-2 Greek 3 Greek 31, 32 History 19, 20 Italian 3, 4 Latin A6 Latin 31, 32 Mathematics A1, A2 (VI) Mathematics 23-24 *Music 1-2 Politics 1, 2	Classical Civilization 52 English A4, A5 (II) English 37, 38 History 15-16 History 121, 122 Mineralogy 17-18 *Music 11, 12 Physical Education A1 (II) (Lecture) Physical Education D1, D2 Religion 1-2	†Education 183, 184 English A4, A5 (I) French 1a, 2a (III) French 17, 18 German 1-2 (III) Greek 1-2 Greek 3 Greek 31, 32 History 19, 20 Italian 3, 4 Latin A6 Latin 31, 32 Mathematics A1, A2 (VI) Mathematics 23-24 *Music 1-2 Politics 1, 2 Zoology 7-8
3.10	Economics A1-A2 (I-VI) †Education B (I) *History 155, 156 *Music 9-10 Physical Education A1, A2 (I) Physical Education B1, B2 (III) (3.30)	*Fine Arts 103, 104 History 121, 122 Latin 41, 42 Physical Education A1, A2 (III)*	†Education B (I) *History 155, 156 *Music 9-10 Physical Education A1, A2 (I) Physical Education B1, B2 (III) (3.30)
4.10	†Mathematics 151, 152 (4-5.30) Physical Education A1, A2 (IV) Physical Education B1, B2 (III)		†Mathematics 151, 152 (4-5.30) Physical Education B1, B2 (III)

Courses marked with an asterisk [*] are given at Columbia University;

ATTENDANCE

THURSDAY	FRIDAY	SATURDAY
Astronomy 1, 2 Economics 117 English 19, 20 History 9, 10 History 11, 12 Latin 15, 16 Zoölogy 1-2	Anthropology 1, 2 Chemistry 145-146 English B1, B2 (I) English B11, B12 (II) English 7-8 French 7, 8 German 3, 4 (II) German 5, 6 (III) Introductory Science 1-2 Italian 1, 2 Latin A1, A2 (I, II, III) Latin A3, A4 Mathematics 27-28 Philosophy 21-22	
Classical Civilization 52 English A4, A5 (II) English 37, 38 History 15-16 History 121, 122 *Music 11, 12 Old Irish, 1, 2 Religion 1-2	†Education 183, 184 English A4, A5 (I) French 1a, 2a (III) French 17, 18 German 1-2 (III) Greek 1-2 Greek 3 Greek 31, 32 History 19, 20 Italian 3, 4 Latin A6 Latin 31, 32 Mathematics A1, A2, (VI) Mathematics 23-24 Politics 1, 2 Zoölogy 7-8	
*Fine Arts 103, 104 History 121, 122 Latin 41, 42 Physical Education A1, A2 (III)	†Education B (I) *History 155, 156	

those marked with a dagger [†] are given at Teachers College.

ACADEMIC CALENDAR

1915-1916

- 1915—Sept. 13—Monday, Last day for filing applications for entrance and deficiency examinations in September.
- Sept. 20—Monday, Entrance examinations and examinations for deficient students begin.
- Sept. 22—Wednesday, Registration begins.
- Sept. 28—Tuesday, Registration ceases for students previously matriculated. Later applications received only upon payment of an additional fee of \$5.
- Sept. 29—Wednesday, First half-year, 27th year, begins.
Registration ceases for students matriculating for the first time. Later applications received only upon payment of an additional fee of \$5.
- Oct. 19—Tuesday, Stated meeting of University Council.
- Nov. 2—Tuesday, Election Day, holiday.
- Nov. 24—Wednesday, Annual Thanksgiving Service in St. Paul's Chapel.
- Nov. 25—Thursday,
to
Nov. 27—Saturday, inclusive, Thanksgiving holidays.
- Dec. 12—Sunday, Annual Commemoration Service in St. Paul's Chapel.
- Dec. 21—Tuesday, Stated meeting of University Council.
- Dec. 22—Wednesday,
to
1916—Jan. 4—Tuesday, inclusive, Christmas holidays.
- Jan. 13—Thursday, Last day for filing applications for January entrance examinations.
- Jan. 20—Thursday, January entrance examinations begin.
- Jan. 26—Wednesday, Mid-year examinations begin.
- Feb. 7—Monday, Registration begins.
- Feb. 8—Tuesday, First half-year ends.
- Feb. 9—Wednesday, Second half-year begins.
University service in St. Paul's Chapel.
Registration ceases for students entering the second half-year. Later applications received only upon payment of an additional fee of \$5.
- Feb. 15—Tuesday, Stated meeting of University Council.

- Feb. 22—Tuesday, Washington's Birthday, holiday.
- April 1—Saturday, Last day for filing applications for noncompetitive scholarships.
- April 18—Tuesday, Stated meeting of University Council.
- April 20—Thursday,
to
April 24—Monday, inclusive, Easter holidays.
- May 22—Monday, Final examinations begin.
- May 30—Tuesday, Memorial Day, holiday.
- June 4—Sunday, Baccalaureate service.
- June 7—Wednesday, Commencement Day.
- June 14—Wednesday, Second half-year ends.
- June 19—Monday, Examinations of the College Entrance Examination Board begin. The dates for filing applications are contained in a circular issued by the Board, Post-office Sub-Station 84, New York, N. Y.
- July 5—Wednesday, Seventeenth Summer Session of Columbia University opens.
- Aug. 16—Wednesday, Seventeenth Summer Session of Columbia University closes.
- Sept. 11—Monday, Last day for filing applications for entrance or deficiency examinations in September.
- Sept. 18—Monday, Entrance examinations and examinations for deficient students begin.
- Sept. 20—Wednesday, Registration begins.
- Sept. 26—Tuesday, Registration ceases for students previously matriculated. Later applications received only upon payment of an additional fee of \$5.
- Sept. 27—Wednesday, First half-year, 28th year, begins.
Registration ceases for students matriculating for the first time. Later applications received only upon payment of an additional fee of \$5.

INDEX

- Absence, Leave of, 53
 Absence and Tardiness, Regulations regarding, 64
 Academic Calendar, 112
 Academic Discipline, 16
 Administration, Officers of, 13
 Admission, 16-52: to the freshman class, 17; to advanced standing, 28; as special students, 29; preliminary application for, 18
 Admissions, Committee on Undergraduate, 13
 Advanced Standing, Admission to, 28
 Advancement, Regulations regarding, 64
 Advice to Students, 57, 63
 Age required for matriculation, 16
 Anthropology, courses in, 78
 Application for Admission, 18
 Architecture, courses in, 91; relation to School of, 61
 Astronomy, courses in, 79

 Bachelor of Arts, courses for degree of, 16, 58
 Bachelor of Science, courses for degree of, 16, 59
 Biology, *see* Botany and Zoölogy
 Bookstore, University Press, 75
 Botany, courses in, 79; entrance requirements in, 39
 Brooks Hall, 73
 Buildings and Grounds, Committee of Trustees on, 7

 Calendar, Academic, 112
 Certificate of Character required for admission, 17, 28
 Certificate of Health required for admission, 17, 28
 Change of Program, 57
 Chapel Service, 75
 Character, Certificate of, 17, 28
 Chemistry, courses in, 81; entrance requirements in, 31
 Classical Civilization, courses in, 85
 Classical Philology, courses in: Classical Civilization, 85; Greek, 82; Latin, 84
 Classification of Students, 65
 College Entrance Examination Board, 20
 Columbia University, courses given at, 77; relation of Barnard College to, 14; graduate courses in, 60; Library, 74; public lectures, 75; School of Architecture, 61; School of Journalism, 62; Department of Music, 61
 Committees: of Faculty, 13; Trustees, 7
 Conditions, Entrance, 27
 Council, University, Barnard College Representatives on, 13
 Course numbers, significance of, 77
 Courses of Instruction: Departmental Statements, alphabetically arranged, 78; general statement, 16. *See also* Program of Studies

 Credit, General Regulations regarding, 64; Additional Credit for High Standing, 65
 Curriculum, *see* Program of Studies

 Deficiency Examinations, *see* Examinations in Course, Special
 Definitions of Requirements (entrance examinations), 30
 Degrees: Bachelor of Arts, 16, 58; Bachelor of Science, 16, 59
 Departmental Statements, in alphabetical order, 78
 Discipline, Academic, 16
 Dismissal, Honorable, 53
 Dormitory, *see* Residence Hall
 Drawing, entrance requirements in, 31; Submission of Drawings, 51

 Economics and Social Science, courses in, 86
 Education, Committee of Trustees on, 7; courses in, 87; relation to School of, 61
 Elective Studies, Choice of, 56, 57, 63; filing of blanks, 53, 63
 Ella Weed Memorial Reading-room, 75
 English, courses in, 87; entrance requirements in, 32
 Enrolment for Courses, 53
 Entrance Conditions and Probation, 27
 Entrance Requirements, 16-52; application for examination, 21; certificate of character, 17; certificate of health, 17; definitions of requirements (in alphabetical order), 30; examination fee, 21; examination subjects, 18; examinations, 17, 20-26; general statement, 16; schedule of examinations, 22; school record, 17; submission of note-books, drawings, etc., 51
 Examinations, Entrance, 17-51; application for, 21; held by College Entrance Examination Board, 20; held by Columbia University, 20, 22; definitions of requirements in, 30; fees, 21; schedule of, 22; special examinations, 22; held by State Education Department, 25; subjects required, 18
 Examinations in Course, Stated, 64; Special, 64
 Executive Committee of Trustees, 7
 Expenses, 53-55
 Extension Teaching: courses which may be counted toward degree, 57; removal of entrance conditions by courses in, 28

 Faculty and Other Officers of Instruction, 10
 Fees, 53; for entrance examination, 21
 Fellowship, Graduate, 70
 Finance, Committee of Trustees on, 7
 Fine Arts, courses in, 90
 Founders, 9

- French, courses in, 103; entrance requirements in, 37. *See also* Modern Languages, Requirements in
- General Statement, 16
- Geography, entrance requirements in, *see* Physiography
- Geology, courses in, 92
- German, entrance requirements in, 39
See also Modern Languages, Requirements in
- Germanic Languages and Literatures, courses in, 93
- Grades and Credit, 64
- Graduate Faculties, Courses under, 60
- Graduate Fellowship, 70
- Graduation, Requirements for, *see* Program of Studies
- Greek, courses in, 82; entrance requirements in, 41
- Health, Certificate of, 17, 27
- Health and Physical Training, 74; *see also* Academic Discipline
- History, courses in, 96; entrance requirements in, 42
- Honorable Dismissal, 53
- Honors, Committee of Faculty on, 13; Departmental, 72; Degree with, 73
- Hygiene, courses in, *see* Education and Physical Education
- Instruction, Committee of Faculty on, 13; Officers of, 10; courses of, 77-106
- Introductory Science, courses in, 78
- Italian, courses in, 104; entrance requirements in, 43
- Journalism, School of: admission to two-year course preparatory to, 19; program of two-year course preparatory to, 60; relation of Barnard College to, 62
- Latin, courses in, 84; entrance requirements in, 44
- Leave of Absence, 53
- Lectures, Public, 75
- Library, 74
- Major Subjects, 56, 58, 59, 63
- Mathematics, courses in, 97; entrance requirements in, 46
- Matriculation, 52
- Mineralogy, courses in, 98
- Modern Languages, Requirements in, 58
- Music, courses in, 98; entrance requirements in, 47; relation to Columbia University Department of, 61
- Musical Art, Institute of, 61
- New York School of Philanthropy, relation to, 62
- New York State Education Department, Examinations of, 25, 26
- New York State Scholars, Fees of, 54
- Non-matriculated Special Students, 29
- Note-books, Submission, of, 51
- Officers: of Administration, 13; of Instruction, 10
- Old Irish, courses in, 105
- Organizations, Student, 75; Faculty Committee on, 13
- Philanthropy, 62; relation to New York School of, 62
- Philosophy, courses in, 99; graduate courses under Faculty of, 60
- Physical Education, courses in, 100
- Physical Training, Health and, 74
- Physics, courses in, 102; entrance requirements in, 48
- Physiography, entrance requirements in, 49
- Point, definition of a, 54
- Political Science, graduate courses under Faculty of, 60, 62
- Politics, courses in, 103
- Practical Arts, School of, 59
- Prizes, 70
- Probation, admission on, 27
- Professional Schools, courses in, 60
- Program, change of, 57
- Program of Studies, 55-60; general rules, 55-58; Bachelor of Arts, 58; Bachelor of Science, 59; general two-year course, 59; two-year course preparatory to School of Journalism, 60
- Psychology, courses in, 100
- Public Lectures, 75
- Pure Science, graduate courses under Faculty of, 60
- Reading-room, Ella Weed Memorial, 75
- Regents' examinations, *see* New York State Education Department
- Registration, 52
- Regulations Regarding Examinations in Course, Credit, and Advancement, 64
- Religion, courses in, 103; at Union Theological Seminary, 62
- Requirements, Entrance, 16-52
- Residence Hall, 73
- Residence, *see* Academic Discipline; required for degree, 56
- Romance Languages and Literatures, courses in: French, 103; Italian, 104; Old Irish, 105; Romance Philology, 105; Spanish, 104
- Scheme of Attendance, 108
- Scholarships, 65-69; application for, 21-66; classification, 65; Committee of Faculty on, 13; competitive, 66; conditions of award, 66; non-competitive, 68; number and value, 65; special funds, 70; state scholars, fees of, 54
- School of Architecture, relation to, 61
- School of Education, relation to, 61
- School of Journalism: admission to two-year course preparatory to, 19; program of two-year course preparatory to, 60; relation of Barnard College to, 62
- School of Philanthropy, relation to, 62
- School of Practical Arts, 59
- School Record required for admission, 17
- Self-government, 75
- Social Science, courses in, 86
- Sociology, courses in, 86
- Spanish, courses in, 104; entrance requirements in, 49
- Special Funds, 70
- Special Students, 29
- Statistics, 76
- State Education Department, examinations of, 25, 26
- State Scholars, Fees of, 54
- Student Council, 75
- Student Organizations, 75; Committee of Faculty on, 13
- Students, Classification of, 65

- Submission of Note-books, Drawings,
etc., 51
Summer Session; courses which may be
counted for entrance, 27; courses which
may be counted for degree, 57
Teachers College, courses given at, 77;
School of Education, 61; School of
Practical Arts, 59
Trustees, Board of, 6; Associate Mem-
bers of, 8; Committees of, 7
Tuition, fees for, 54
Undergraduate Admissions, Committee
on, 13
Union Theological Seminary, relation to,
62
University Council, Barnard College
Representatives on, 13
University Press Bookstore, 75
Withdrawal, 54
Zoölogy, courses in, 105; entrance require-
ments in, 49

